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BULLETIN

Volume 61, Number 1

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Catalog 1970-71

Eastern Kentucky University

BULLETIN • VOLUME 61 • NUMBER 1

MEMBER OF

American Association of Colleges for Teacher Education
American Association of State Colleges and Universities
National Association for Business Teacher Education
Association for Field Services in Teacher Education
American Association of Junior Colleges
American Association of University Women
American Council on Education
American Technical Education Association

ACCREDITED BY

Southern Association of Colleges and Schools
National Council for Accreditation of Teacher Education
National Association of Schools of Music
National League for Nursing

BULLETIN

Vol. 61 July 1970 No. 1

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TABLE OF CONTENTS

PART ONE—The University 7
Introduction 9
History 10
Purpose 11
The Campus 13

PART TWO—Student Services Information 25
Expenses and Living Accommodations 25
Registration Fees 26
Special Fees 27
Living Accommodations 29
Scholarships 32
Loans 33
Student Employment 34
Financial Assistance Service 32
Other Student Services and Activities 36
Guidance and Counseling Service 31
Athletics and Recreation 36
Social Activities 36
Student Organizations 37
Cultural Activities 38
Student Awards 39
Placement Office 41
The Alumni Association 41

PART THREE—General Academic Information 43
Admission to the University 44
Academic Programs 46
Degrees (graduate School) 49
Teacher Education Curricula 50
Pre-Professional Curricula 53
General Education Requirements 54
Academic Regulations 58
Course Prefixes 57
Semester When Courses are Offered 58

PART FOUR—Academic Divisions

Central University College 65
College of Applied Arts and Technology 111
College of Arts and Sciences 169
College of Business 273
College of Education 297
Graduate School 335
Richmond Community College 339
Continuing Education 343

PART FIVE—Official Directory 347
Board of Regents 349
Administration 351
Faculty 352
Administrative Staff 349

PART ONE
PART TWO
PART THREE
PART FOUR
C. U.
A. A. T.
A. & S.
BUSINESS
EDUCATION
GRAD. SCHOOL
CONT'G. EDUCATION
PART FIVE

CALENDAR 1970

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EASTERN KENTUCKY UNIVERSITY
1970-71 CALENDAR

FIRST SEMESTER

August 26	Wednesday	9:00 a.m.	Faculty Day.
		1:00 p.m.	Dormitories open for new and transfer students.
August 27	Thursday	8:00 a.m.	Orientation meeting new and transfer students, Alumni Coliseum.
		1:00 p.m.	Orientation meeting, transfer students, Hiram Brock Auditorium.
August 28	Friday	8:00 a.m.	Registration of students in upper division colleges.
August 29	Saturday	8:00 a.m.	Orientation meeting, previously enrolled Central University College students, Hiram Brock Auditorium.
		9:00-11:30 a.m.	Registration of evening and Saturday students.
August 31	Monday	8:00 a.m.	Registration of students in Central University College.
September 1	Tuesday	8:00 a.m.	Registration of students in Central University College.
September 2	Wednesday	8:00 a.m.	Classes begin.
September 7	Monday		No classes.
September 9	Wednesday		Last day to enter a course. Last day to change from audit to credit.
September 18	Friday		Last day to drop a class without a grade. Last day to change from credit to audit. Last day to change to "Pass-Fail." Last day to change from "Pass-Fail" to regular grading system.
October 23	Friday	10:00 a.m.	Mid-semester reports to Registrar.
October 30	Friday		May and August, 1971, graduates must apply for graduation by this date in their college dean's office.
November 20	Friday		Last day to drop a class.
November 25	Wednesday	12:30 p.m.	Thanksgiving holiday begins.
December 16-22			Final examinations.
December 22	Friday		Close of first semester.

SECOND SEMESTER

January 9	Saturday	9:00-11:30 a.m.	Registration of evening, and Saturday students.
January 11	Monday	8:00 a.m.	Registration of students in upper division colleges.
		1:00 p.m.	Registration of students in Central University College.
January 12	Tuesday	8:00 a.m.	Registration of students in Central University College.
January 13	Wednesday	8:00 a.m.	Classes begin.
January 20	Wednesday		Last day to enter a course. Last day to change from audit to credit.
January 29	Friday		Last day on which a course may be dropped without a grade. Last day to change from credit to audit. Last day to change to "Pass-Fail." Last day to change from "Pass-Fail" to regular grading system.
March 12	Friday	10:00 a.m.	Mid-semester reports to Registrar.
March 14-21			Spring vacation.
April 7	Wednesday		Last day to drop a class.
April 30	Friday		December, 1972, graduates must apply for graduation by this date in their college dean's office.
May 3-8			Final examinations.
May 8	Saturday		Close of second semester.
May 9	Sunday		Baccalaureate Service
May 10	Monday (tentative)		Commencement.

SUMMER SESSION

June 14	Monday	8:00 a.m.	Summer school registration.
June 15	Tuesday	8:00 a.m.	Classes begin.
			Last day to register for a full load.
June 17	Thursday		Last day to enter a course. Last day to change from audit to credit.
June 23	Wednesday		Last day to drop a class without a grade. Last day to change from credit to audit. Last day to change to "Pass-Fail."
July 23	Friday		Last day to drop a class.
August 5	Thursday		Commencement.
August 6	Friday		Close of summer school.

70/71
CATALOG

The University

Introduction . 9

History . 10

Purpose . 11

The Campus . 13

All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

This bulletin was prepared by Eastern Kentucky University, edited by the Offices of Academic Affairs and Public Affairs and paid from state funds.

EASTERN KENTUCKY UNIVERSITY . . .

Dedicated to Serving Kentucky Since 1906

INTRODUCTION

Eastern Kentucky University is a coeducational public institution of higher education offering general and liberal arts programs, pre-professional and professional training in education and various other fields at both the undergraduate and graduate levels. Located in Richmond, Madison County, Kentucky, Eastern has a distinguished record of more than six decades of educational service to the Commonwealth. The institution is recognized as one of the nation's leading producers of teachers with over seventy per cent of its 19,000 graduates having entered the teaching profession.

Richmond is on the main line of the L & N Railroad, 112 miles south of Cincinnati, Ohio. Situated twenty-six miles southeast of Lexington, Kentucky, Richmond is conveniently reached by automobile over Interstate 75 from Northern Kentucky and Cincinnati to the North and over U. S. Route 25 (Dixie Highway) from Southeastern Kentucky. Richmond is also served by U. S. Route 227 and Kentucky Route 52. Combinations of major highways in the state with these highways make Richmond easily accessible from Eastern and Northeastern Kentucky as well as the Bluegrass and Central Kentucky area and the Metropolitan area of Louisville.

Completion of Interstate Highways, I-64 (East-West) and I-75 (North-South), and the Eastern Kentucky Turnpike, provide even greater convenience in automobile travel to Richmond, since the city is located near the convergence of these three arterial highways.

Richmond, the county seat of Madison County, is an expanding community of approximately 15,000 population. Served by fine churches representing most Christian faiths, the community provides an excellent environment for the University student.

In and around Richmond are many areas of historic and scenic interest. Boonesborough State Park, birthplace of Kentucky, is located twelve miles to the north. Many other historical places are within easy driving distance. Scenic and recreational areas surround this section of the state.

HISTORY

The General Assembly of 1906 enacted legislation establishing the Eastern Kentucky State Normal School. Governor J. C. Beckham signed the bill into law on March 21, 1906, and on May 7 of that year, the Normal School Commission, meeting in Louisville, selected the campus of the old Central University in Richmond, Kentucky, as the site of the new school. On June 2, 1906, Ruric Nevel Roark was chosen President of the Normal school and the training of teachers was initiated.

In 1922, Eastern became a four-year institution known as the Eastern Kentucky State Normal School and Teachers College. The first degrees were awarded by this institution in 1925. In 1928, the College was accredited by the Southern Association of Colleges and Secondary Schools. In 1930, the General Assembly renamed the school as the Eastern Kentucky State Teachers College.

In 1935, a graduate program was approved at Eastern, leading to the Master of Arts in Education. In 1948, the General Assembly removed the word "Teachers" from the name of the College and granted the College the right to award non-professional degrees.

The most significant day since its founding came for Eastern February 26, 1966, when Governor Edward T. Breathitt signed into law a bill renaming the institution Eastern Kentucky University and sanctioning the awarding of graduate degrees in academic fields other than education.

During this period of time, Eastern Kentucky University has increased rapidly in size and stature. Beginning with a few students engaged in short review and certificate courses, the University today serves thousands of Kentucky's young men and women by offering a curriculum leading to the Bachelor of Arts, or Bachelor of Science degree in teacher education, or in general or professional areas, and an expanding graduate program that presently offers degrees at the Master's level in many other fields as well as the already well-established Master of Arts degree in Education and the various fifth- and sixth-year leadership programs in education. Specialist degree programs have been implemented in Education and Technology. In addition to these programs, Eastern offers a joint doctoral program with the University of Kentucky leading toward the Ed.D. degree in education.

Ever-mindful of the purpose of its founding, Eastern continues to recognize its historic function of preparing quality teachers for the elementary and secondary schools of the Commonwealth. However, a strong liberal arts curriculum leading to appropriate degrees, together with preprofessional courses in several areas and graduate programs, enable Eastern to serve the Commonwealth as a general university.

PURPOSE

The purpose of Eastern Kentuckky University is to provide for its students those intellectual and cultural pursuits which will develop in them habits of scholarship and intellectual curiosity; which will provide for them a deep understanding of American democracy and their role in maintaining its strength and vitality; which will imbue them with an understanding of man and his aspirations; and which will enable them to communicate effectively and efficiently.

Within this general purpose, the University has three more specific purposes: (1) to provide instruction in the arts and sciences, in business, in professional education, and in technological subjects; (2) to provide service to the community and region through the faculty serving as consultants in their fields of specialization and engaging in research dealing with problems of our society, and (3) to engage in research to advance knowledge in the subject matter areas with which the various colleges of the University are concerned.

These purposes of the University are accomplished through the Central University College, College of Arts and Sciences, College of Business, College of Education, College of Applied Arts and Technology, and the Graduate School.

The Central University College has responsibility for students during the first two years of the four-year undergraduate program. It organizes and maintains a centralized advising program to assist students in selecting an appropriate curriculum, it implements a well integrated general education program, and it administers selection of beginning course work in preparation for the student's major field.

The College of Arts and Sciences provides, in cooperation with the Central University College, for all undergraduate students in the University. It also provides advanced study in various disciplines and offers courses which are intended to prepare the student for later study in professional fields such as medicine, dentistry, medical technology, engineering, law, social work and the ministry. It provides the academic specialization for students working for teacher certification in elementary and secondary education.

The College of Business provides one-, two-, and four-year programs for students preparing to enter business occupations. The one- and two-year programs are designed specifically to provide the specialized training needed for successful vocational careers. The four-year programs are based upon a liberal education as a foundation for personal and career development throughout the student's working life. Four-year students are expected to take a group of courses built around the functional areas of business to attain a strong foundation in business procedures, policies, and forms of analysis. They may specialize in several areas of business, such as accounting, business teaching, economics, finance, management, marketing and secretarial work.

The College of Education assumes responsibility for the preparation of students majoring in elementary education, health, library science, physical education, psychology, recreation and school health; cooperates with the Colleges of Arts and Sciences, Business and Applied Arts and Technology in programs designed to prepare secondary education majors; cooperates with the Graduate School in the development and implementation for the advanced preparation of elementary teachers, secondary teachers, guidance counselors, supervisors, school principals and superintendents; assists local school districts in in-service education programs; and provides professional leadership (through teaching, research, publication, workshops, conferences and consultant services, in education at the local, state and national levels.

The College of Applied Arts and Technology prepares teachers of technical subjects within the fields of industrial arts and home economics and offers programs of study to prepare individuals for technical occupations and professions in agriculture, nursing, industrial technology, home economics, law enforcement and crafts. These programs range in length from two to four years. In addition, the College houses the Traffic Safety Institute and the Kentucky Peace Officers Standards and Training Council. Its faculty is sensitive to emerging, as well as existing technical occupations and professions that require college-trained personnel. New curricula are developed, in keeping with the resources of the institution to meet such demands.

The Graduate School administers programs leading to the degrees of Master of Arts, Master of Science, Master of Business Administration, Master of Music Education, Master of Public Administration and Master of Arts in Education. Fields in which the Master of Arts degree is awarded include: English, geography, history, political science and guidance and counseling for non-school personnel. Master of Science degree programs are available in the areas of biology, chemistry, industrial education, industrial technology, school and clinical psychology. Degree programs leading to the Master of Arts in Education are available in the areas of: elementary education, counseling, library science, reading, and most secondary teaching fields. Standard certification programs are available for school principals and supervisors. Sixth-year programs are available for school leaders, guidance counselors, and in most teaching fields. Specialist degree programs in Education (P.E.) and technology are offered. The Graduate School also directs the joint doctoral program offered cooperatively with the University of Kentucky leading to the Ed.D. degree. Through its various programs, and in cooperation with the University's upper division colleges, the Graduate School provides advanced study to meet the needs of the region's teachers, business, and governmental agencies. Programs are developed within a philosophy which assumes that the foregoing general needs will be satisfied best by individualizing program planning to meet both the specific interests and professional requirements of students.

Continuing Education—The Division of Continuing Education, in cooperation with the five university colleges and the graduate school, provides educational opportunities for those who for various reasons do not find it possible or practical to enroll for the regular university program. These services are provided through extension classes, correspondence courses (both college and high school level), consultative services by the faculty and staff, Saturday and evening classes, workshops, conferences, institutes, and other short term courses.

Richmond Community College—As a central coordinating office of Eastern's one- and two-year programs, Richmond Community College provides information concerning all one-year and associate degree programs offered by the University. It also offers guidance to students or prospective students. Richmond Community College services in cooperation with the Office of Continuing Education and the various College of the University.

THE CAMPUS

The Eastern campus embraces approximately 325 acres of gently-rolling bluegrass slopes, and is further enhanced by the thoughtful selection and placement of trees and shrubs.

The various academic buildings, dormitories, and other facilities, reflecting several styles of design, are centered around a replica of an ancient Greek amphitheater which seats 2,500 persons.

Special emphasis in beauty and usefulness has been placed upon the academic heart of the University found in the complex of the John Grant Crabbe Library, the University Building, and the Bert Combs Classroom Building. Following are brief descriptions of the major buildings and facilities of Eastern Kentucky University.

ACADEMIC BUILDINGS

ALUMNI COLISEUM

Alumni Coliseum houses facilities for physical education, general college classrooms and a basketball playing arena. The physical education facilities include auxiliary gymnasiums, special purpose rooms, locker and shower spaces and both indoor and outdoor swimming pools. Classrooms are included for general university use. Spectator seating will accommodate approximately 6,500 persons for basketball games and approximately 7,500 persons for convocations, lectures, and similar events. The building provides office space for Physical Education faculty, Department of Athletics staff and R.O.T.C. staff.

BERT COMBS BUILDING

The Bert Combs Building was named to honor a former governor of the Commonwealth of Kentucky. Completed in 1964, the building houses the Colleges of Business and Education, Central University College, and the Departments of English, Speech and Drama and Political Science. The four-story building is completely air-conditioned and provides teaching stations for 2,200 students. It contains two large lecture rooms and provides offices for members of the faculties of these departments. Of striking design, the exterior of the building is faced with cut limestone and provides a unified concept in the heart of academic campus.

CARTER BUILDING

The Carter Building is the center of Eastern's agriculture complex, with facilities for the lecture, laboratory and shop activities of the Department of Agriculture. Located near both the greenhouse and dairy center, the structure contains five offices, four lecture rooms, two laboratories, and a shop.

CAMMACK BUILDING

The James W. Cammack Building was named to honor an appointee to Eastern's first Board of Regents. In the summer of 1961, this building was completely renovated and is currently used to house the Art Department, Foreign Language Department, and other departments of the University. The exhibit room of the Art Department is located on the first floor and a modern, well-equipped language laboratory on the second floor is used by the Foreign Language Department.

COATES ADMINISTRATION BUILDING

The Thomas Jackson Coates Administration Building was named in honor of Eastern's third president. The offices of the President, Vice President for Academic Affairs, Dean of Admissions and Registrar, and other administrative personnel are located in this building. The building contains the Hiram Brock Auditorium which has a seating capacity of 1,700. The auditorium has a stage 40 feet by 30 feet, equipped with adequate curtains and drops, and a modern motion picture projection room. In 1965 a thorough renovation of this facility was completed. In this renovation the building was completely air-conditioned and refurbished, a 40-rank Holtkamp pipe organ was installed in the Brock Auditorium.

CRABBE LIBRARY

The John Grant Crabbe Library, named to honor Eastern's second president, occupies a central and convenient position on the campus. A major reconstruction of this facility in 1966 enlarged the library to 148,000 square feet of floor space. The design provides diversified stacks with adjacent study areas. Individual study carrels are located throughout the building. Fully air-conditioned, the library provides seating space for approximately 2,500 students simultaneously and currently houses 214,000 volumes. It is designed to ultimately house a half million volumes.

DONOVAN BUILDING

The Donovan Building, named to honor the late Dr. Herman Lee Donovan, fourth president of Eastern Kentucky University and President Emeritus of the University of Kentucky, was first occupied in September of 1961. This building consists of several units housing the laboratory school of Eastern Kentucky University, and provides college classrooms. The facility is complete in all respects, utilizing modern concepts in design and equipment. Facilities are included for the laboratory school, from the nursery school through the twelfth grade, with appropriate units designed for physical education, music, arts and crafts, and general academic work at the elementary and secondary levels. Completely air-conditioned, this building compares favorably with any similar facility in the nation. The completion of an addition to the Donovan Building provides additional elementary classrooms, a nursery school, and studios for educational television and an FM radio station.

FITZPATRICK ARTS BUILDING

This building was named to honor H. D. Fitzpatrick, Sr., a long-time member of the Board of Regents of the University. The Fitzpatrick Arts Building houses departments within Applied Arts and Technology. The Gibson Addition to the building in 1961 added to the shop and classroom facilities.

BURRIER HOME ECONOMICS BUILDING

The Department of Home Economics and the Department of Nursing are housed in this four-story structure named for Miss Mary K. Burrier, former chairman of the Home Economics Department. The building contains lecture halls, research and study areas, 18 classrooms, and a "family-living center."

MOORE BUILDING

The Moore Building, housing the Departments of Biology, Chemistry and Physics, was named to honor Dr. William J. Moore, former Academic Dean. The air-conditioned facility, occupied in February, 1968, contains laboratories, classrooms, faculty offices and several large lecture rooms.

STEPHEN COLLINS FOSTER BUILDING

The Stephen Collins Foster Music Building houses the Music Department and provides classrooms for other divisions of the University. Facilities includes, in addition to classrooms, nineteen practice rooms, ten studios, a band room and a chorus room, a number of auxiliary rooms such as offices for the head of the Music Department and the band directors, listening rooms for music appreciation, student and faculty lounges, and storage and locker space. The building was air-conditioned in the spring of 1961.

ROARK BUILDING

Roark Building was named to honor Dr. Ruric Nevel Roark, Eastern's first president. In 1965, this building was renovated, refurbished and completely air-conditioned. The building will provide facilities for the departments of Mathematics, Geography, Geology, Anthropology and Sociology.

MEMORIAL SCIENCE BUILDING

Memorial Science Building is a modern four-story structure housing spacious, well-equipped laboratories and lecture rooms for the departments of Biology, Chemistry, and Physics.

ROBERT B. BEGLEY BUILDING

Newest of the multi-purpose structures build to fulfill both academic and athletic requirements, the Physical Education-Athletic Complex accommodates some 2,000 students simultaneously. The 10-story structure houses offices for the departments of physical education, military science and law enforcement. It seats approximately 20,000 for football contests.

WILLIAM L. WALLACE BUILDING

One of three buildings planned for the old Hanger Stadium site, the new classroom building will have 43 classrooms, a basement, penthouse and two large lecture halls equipped with projection and sound equipment. Completion is anticipated during the second half of the 1970-71 year.

TURLEY HOUSE

The Turley House is the residence for those students in the Home Economics Department who take the laboratory course in household management. Here the girls live and work together for nine weeks, cooperatively preparing their own meals, doing their own marketing, entertaining their guests, and making a pleasant home life for themselves.

UNIVERSITY BUILDING

The University Building was constructed in 1874 to house Central University. This four-story brick structure is the oldest academic building on the campus. In the summer of 1961 the building was completely renovated to house the J. T. Dorris Museum and the departments of History and Social Studies.

WEAVER HEALTH BUILDING

The Weaver Health Building is named for the late Charles F. Weaver of Ashland, Kentucky, who served on the Board of Regents at Eastern from 1920 to 1932. In 1965, a renovation of this building was completed, converting it into a health and physical education facility for women students. The building provides a large gymnasium, a spacious modern dance studio, an official size tile swimming pool, handball courts, several classrooms, and faculty offices.

WOMEN'S RESIDENCE HALLS

BROWN TELFORD HALL

Brown Telford Hall is a 14-story dormitory designed to accommodate 676 single women students. The dormitory is air conditioned and contains lounge and recreation space. The building named to honor Miss Brown E. Telford, former member of the Music faculty, is the first unit in the planned dormitory complex for women.

BURNAM HALL

Burnam Hall was named for Judge A. R. Burnam, who served in the Kentucky General Assembly, and helped Eastern secure her first significant appropriation. It provides beautiful, comfortable, and fireproof living quarters for 370 students. Most of the rooms are arranged in suites of two with a connecting bath. A few rooms have private baths.

CASE HALL

Case Hall was named to honor Mrs. Emma Y. Case, Dean of Women of the College from 1932 until her retirement in 1962. The dormitory provides living accommodations for 550 women students. In addition to bedrooms, the building contains a spacious reception lounge, parlor and recreational spaces. A large grill provided in the dormitory will seat approximately 175 persons.

McGREGOR HALL

McGregor Hall is a six-story dormitory designed to provide excellent living accommodations for 448 women students. This dormitory is completely air-conditioned and includes lounge and recreational spaces. This facility, named to honor Judge Thomas B. McGregor, a past member of the Board of Regents, was first occupied in September, 1964.

SIDNEY CLAY HALL

Sidney Clay Hall, named to honor a member of the Board of Regents, provides living accommodations for 420 women students. The dormitory is completely air-conditioned and includes lounge facilities and other service spaces. The building contains a modern cafeteria which seats approximately 300 people.

SINGLETON P. WALTERS HALL

Walters Hall was named to honor Mr. Singleton P. Walters who was instrumental in the founding of Eastern Kentucky State Normal School, predecessor of Eastern Kentucky University. This 9-story air-conditioned facility houses 404 coeds and was first occupied in 1967.

SULLIVAN HALL

Sullivan Hall is a dormitory for women and accommodates 172 students. It was named for the first local regent, Jere A. Sullivan, who helped establish the first two normal schools in Kentucky. Sullivan Hall is a comfortable and convenient home for the women who live there. Central baths are located on each floor of the building.

MEN'S RESIDENCE HALLS

BECKHAM HALL, McCREARY HALL, AND MILLER HALL

Beckham Hall, Miller Hall, and McCreary Hall are three units so designed as to form a complex. Each of the dormitories provides accommodations for forty-eight men students. The rooms in these three halls are arranged in suites of four rooms and one bath. For each pair of such sections, one above the other, there is an outside entrance. Office and lounge facilities for these halls are located in Beckham Hall.

Beckham Hall is named for the late J. C. W. Beckham, who was Governor of Kentuckky when Eastern was founded. McCreary Hall is named for James B. McCreary, a Richmond citizen, who twice served the State as Chief Executive. Miller Hall is named for Robert W. Miller, a Madison countian, who introduced in the lower house of the General Assembly a bill establishing Eastern.

COMMONWEALTH HALL

Tallest of Eastern's residence halls, Commonwealth Hall is a 21-story structure housing 545 men students. The air-conditioned building has student bedrooms on 17 floors, with offices, lounge, recreational and laundry facilities on the other 4 floors. This dormitory was first occupied in 1967.

DUPREE HALL

Dupree Hall, one of the twin towers matches Todd Hall in design and capacity. Fully air-conditioned, this men's dormitory, occupied in the summer of 1964, was named to honor Mr. F. L. Dupree, a former member of the Board of Regents.

EARLE B. COMBS HALL

Combs Hall replaced Memorial Hall and forms a quadrangle with Keith, Miller, Beckham and McCreary Halls. This dormitory, completely air-conditioned, provides living spaces for 238 men students. Lounge and recreational facilities are included in the facility.

The hall was named to honor Mr. Earl B. Combs, Sr., a member of the Board of Regents of the University.

KEITH HALL

Keith Hall is a modern, fireproof structure containing 88 bedrooms, a spacious lounge, offices, and auxiliary facilities. It has built-in furniture. The entire building has mechanical ventilation that is designed not only to keep a supply of fresh air in each room, but also to regulate the temperature. Keith Hall was named in honor of the late Dr. Charles A. Keith, former Dean of Men at Eastern Kentucky University, and Mrs. Keith.

MARTIN HALL

Martin Hall is a dormitory that houses 404 men students and contains an air-conditioned cafeteria, spacious recreation and lounge space, and service facilities.

This outstanding dormitory was named to honor Dr. Robert R. Martin, at the time of his inauguration as the sixth president of Eastern Kentucky University.

MATTOX HALL

Mattox Hall is constructed adjacent to and at right angles with O'Donnell Hall and connected to it by a colonade. This hall matches O'Donnell Hall in all respects and, in addition, contains a snack bar and recreation facilities. This dormitory was occupied for the first time in 1961. Mattox Hall was named to honor M. E. Mattox, Registrar of the University from 1925 to his retirement in 1961.

O'DONNELL HALL

O'Donnell Hall is a four-story fireproof structure containing 100 bedrooms for men students. This hall was occupied for the first time in February, 1959. A spacious and beautifully furnished lounge, a post office with individual mail boxes, and an adequate parking lot make this residence hall a very well equipped facility. This hall was named to honor Dr. W. F. O'Donnell, President-emeritus of Eastern Kentucky University.

PALMER HALL

Palmer Hall is a completely air-conditioned dormitory providing living facilities for 300 men students. The building was named to honor Mr. Wilson Palmer, a member of the Board of Regents.

TODD HALL

Todd Hall, the twin to Dupree Hall, is a twelve story dormitory that provides space for 320 men students and is fully air-conditioned. Todd Hall was named to honor Dr. Russell I. Todd, a former member of the Board of Regents.

WILLIAM KEENE HALL

William Keene Hall was named to honor Mr. William Keene, former member of the English faculty of the University. The 16 story air-conditioned facility was designed to house 616 men students and is the first unit in a planned dormitory complex for men.

FAMILY HOUSING FACILITIES

BROCKTON

Brockton is the family housing project at Eastern. It consists of 144 modern fire-resistant apartments in all. There are 72 efficiency units, and 32 two-bedroom units.

The apartments are furnished with an electric refrigerator and gas range. The efficiency units also contain a sleeper couch and a five-piece dinette set. Each apartment has an individual therostatically-controlled gas furnace, tile floors, and acoustical ceilings. The bath includes both shower and tub. A coin-operated laundry with both washers and driers is conveniently located in the project area.

Brockton was named in honor of George Marshall Brock, who had been associated with the University since 1918, as Business Agent or Comptroller since 1923, before retiring in 1969.

HENRY MARTIN HALL

Henry Martin Hall is the first of a series of three-story brick apartment buildings for married students. Located on John Hanlon Drive, near the observatory, the Hall contains 54 one-bedroom apartments.

TRAILER PARKS

Two modern trailer park areas have been constructed adjacent to Brockton. Paved roadways, landscaped area, adequate space and complete utility services are included. Both parks accommodate trailers of all sizes.

VICKERS VILLAGE

Vickers Villege provides modern housing for faculty members and their families in its 34 units. There are 18 two-bedroom apartments in nine duplexes, and 16 two-bedroom apartments located in two eight-unit buildings. The Village is located just off the Eastern by-pass. It is named for John L. Vickers, executive assistant to the President.

OTHER FACILITIES

In addition to the residence units listed herein, the University owns or operates several other facilities for the housing of students. Among these are the Lancaster House and Stateland House for single men students and several apartments and dwellings on campus for the housing of faculty and staff.

OTHER BUILDINGS

ARLINGTON FACULTY-ALUMNI CENTER

Arlington's colonial mansion and rolling, 181-acre grounds provide majestic setting for Eastern's faculty-alumni center which provides a social and recreational outlet including swimming and a golf course, the first nine holes of which are scheduled for Spring 1970 completion. There is also a student recreational area. Arlington serves the University as a research and conference facility as well.

The mansion and surrounding 15 acres, valued at a quarter of a million dollars, were the generous gift of construction industrial W. Arnold Hanger. The remaining acreage was purchased by the Eastern Kentucky University Foundation.

KEEN JOHNSON STUDENT UNION BUILDING

The Keen Johnson Student Union Building contains club rooms for students, recreation halls, the Little Theatre, bookstore, soda fountain and grill, cafeteria, faculty rooms, and a spacious reception room. It was named in honor of a former Governor of Kentucky who was a member of the Board of Regents at the time it was constructed. In 1961 the Student Union Building was renovated and refurnished to provide more extensive services for students, faculty and friends of the University.

BLANTON HOUSE

The two-story brick residence, which is the President's Home, was constructed in 1886 as a residence for the Chancellor of Central University but did not become the property of the University until 1912. This residence has served as the home of Eastern's presidents since that date.

AULT SERVICE BUILDING

The Ault Service Building was named in honor of William A. Ault, who served the University for 45 years as Superintendent of Buildings and Grounds.

This modern facility was completed in 1962. The building not only provides modern shops and office space for the entire maintenance department, but serves as a central supply and storeroom for all departments on the campus.

UNIVERSITY FARM

The University operates a modern farm, engaging in dairying and production of various crops. The farm operation is located away from the main campus and is housed in up-to-date buildings, providing modern sanitary facilities for the production of food products.

THE JONES BUILDING

Occupied in the Spring semester of 1969, the Jones Building is a four-story, air-conditioned annex to the Coates Administration Building. It houses divisions of the offices of academic, business, and public affairs. The offices of the student newspaper and annual are also located in the Jones Building.

CHAPEL OF MEDITATION

The non-denominational Chapel of Meditation will serve the spiritual and meditative needs of the Eastern community from its location between the University Center and the new classroom building. Construction will be financed by the $250,000-plus Alumni Century Fund Campaign.

POWELL UNIVERSITY CENTER

Under construction on the site of Hanger Stadium, the University Center will be the single most expensive building ever constructed on the Eastern campus. Result of a three-year student-faculty committee study, the structure will include a total of 154,000 square feet on three floors. A 1,000-seat cafeteria, an 800 capacity grill, bowling alley, game rooms, television lounges, offices and meeting rooms will be contained in the structure. It will be completed during the 1970-71 year.

MARY FRANCES RICHARDS ALUMNI HOUSE

The Mary Frances Richards Alumni House is a two-story frame home just off the main campus on Lancaster Avenue that houses the Office of Alumni Affairs. Named to honor Mrs. Richards, retired member of the Geography Department faculty and executive secretary of the Alumni Association for 19 years, the new alumni center has been remodeled to provide offices, a lounge, and conference areas.

70/71
CATALOG

Student Services Information

Expenses and Living Accommodations . 26
Student Affairs Office . 31
  Health Services . 31
  Financial Aids . 32
  Student Organizations and Activities . 36
Student Automobiles . 40
Placement Office . 41
The Alumni Association . 41

EXPENSES AND LIVING ACCOMMODATIONS

REGISTRATION FEES AND OTHER EXPENSES

The following list of fees is required of students. All fees must be paid at the time of registration. Incidental fees paid each semester entitle the student to use of the library, to use of the Student Union Building, and to other services as directed by the Board of Regents.

REGISTRATION FEES AND OTHER EXPENSES (Per Semester)

In effect 1970-71 Academic Year

Registration and Incidental Fees (Per Semester)	Kentucky Resident	Out-of-State Resident
Registration Fee:		
Full-time—Graduate and Undergraduate	$120.00	$370.00
Part-time—Undergraduate (Fewer than 12 Semester Hours), Per Hour	11.00	32.00
Part-time—Graduate (Fewer than 9 Semester Hours), Per Hour	14.00	42.00
Incidental Fee:		
Full-time	30.00	30.00
Part-time	2.50	2.50
Student Activity Fee	3.00	3.00
Registration and Incidental Fees (Summer Term)		
Registration Fee:		
Full-time—Graduate and Undergraduate	60.00	185.00
Part-time—Undergraduate (Fewer than 6 Semester Hours), Per Hour	11.00	32.00
Part-time—Graduate (Fewer than 6 Semester Hours), Per Hour	14.00	42.00
Incidental Fee:		
Full-time	15.00	15.00
Part-time	1.25	1.25

Special Fees

	Per Course	
	Regular Semester	Summer Session
Home Economics		
204, 215	$ 7.50	$ 7.50
302	5.00	5.00
Health and Physical Education		
Locker Fee	4.00	2.00
Music		
Music Major—Full Time	35.00	17.50
Music Major—Part Time	17.50	8.75
Non-Music Major—Full Time	30.00	15.00
Military Science		
Uniform Deposit	12.00	N/A
Other Expenses	2.00	N/A

Other Expenses (Uniform for either regular semester or summer session)

Late Registration Fee (per day late)	1.00
Voluntary Change of Schedule	2.00
Transcript Fee (after initial copy)	1.00
Graduation Fee (includes cost of diploma, cap and gown rental, and other graduation expenses)	
Baccalaureate Degree	8.50
Master's Degree	21.00
Post Office Box Rent	1.00
Returned Check Assessment	5.00

(All fees are subject to change without notice)

DEFINITION OF RESIDENT STUDENT FOR FEE ASSESSMENT PURPOSES

(Approved July 22, 1968)

Every student who is not a resident of Kentucky as defined below is required to pay non-resident registration and/or entrance fees.

The following policy, adopted by the Council on Public Higher Education, Commonwealth of Kentucky, in accordance with Section 164.020 (3) of the Kentucky Revised Statutes, is applied to determine a student's eligibility for fees assessed Kentucky residents who enroll at any of the state-supported institutions of higher learning in the Commonwealth of Kentucky. This determination is made at the time of initial enrollment and shall not be changed thereafter except as provided below.

A student under eighteen years of age is eligible to enroll as a resident of Kentucky if his parent or legal guardian has established or has maintained residence in the Commonwealth immediately preceding his original enrollment. No student under eighteen years of age shall be considered to have gained residence in the Commonwealth while a student unless or until his parent or guardian moves into the Commonwealth and acquires residence. If a student under eighteen years of age is enrolled as a resident of the Commonwealth and his parent or legal guardian thereafter moves out of the Commonwealth, the student will become a nonresident at the beginning of his next enrollment. If the parents have different residences, the residence of the parent who has legal custody of the student's person or the residence of the parent who provides the main financial support shall be considered the residence of the student.

An adult student from out-of-state who seeks Kentucky residence status must assume the burden of proving conclusively that he is a resident of the Commonwealth with the present intention of making his permanent home in this state. In general, it is assumed that the intent to remain indefinitely in Kentucky is evidenced not only by what a person states but what a person has actually done. The following criteria may be among those used by authorities of the institution in ascertaining the legal residence of a student: Obtaining full-time employment, establishing a home, buying property, filing state income tax returns, transferring or establishing church membership, affiliating with local organizations, and various other actions which give evidence of intent to remain indefinitely within the Commonwealth. Compliance with any one or more of these criteria does not in itself constitute Kentucky resident status for the student or his parents.

Any student or prospective student in doubt concerning his residence status must bear the responsibility for securing a ruling by stating his case in writing to the Admissions Officer. The student who, due to subsequent events, becomes eligible for a change in residence classification, whether from out-of-state to in-state, or the reverse, has the responsibility of immediately informing the Office of Admissions of this circumstance in writing.

The Council recommends that each institution establish a Non-Resident Fees Committee to consider changes in resident status based on the above criteria. Application for change of residence classification should be made in writing to the person who has been designated by the Board of Trustees or Regents as the Chairman of the Non-Resident Fees Committee. The Chairman may present each case to the Committee for a final decision, and the student will be notified in writing as to the disposition of his application.

This policy shall be applicable with exceptions allowable for possible conflicts with state and federal laws relating to residency such as the Federal Soldiers and Sailors Relief Act.

LIVING ACCOMMODATIONS

Eastern Kentucky University maintains a number of residence halls for single students under 21 years of age. Graduate students, married students and single undergraduate students over 21 years of age at the time of registration must secure special permission from the office of the Dean of Women/Dean of Men if they wish to occupy a room in a residence hall. All dormitory students are responsible for reading and complying with Campus Housing Policies which are placed in all dormitories at the beginning of each semester.

The University furnishes sheets, pillows, pillowcases, and mattress covers for residence halls. All other items are to be furnished by the student. Most of the men's and women's residence halls have modern coin-operated laundry and drying machines. Several laundries and dry cleaning establishments are located a short distance from the campus.

Residence Halls for Women	Rent for Semester (Includes $7.00 Linen Service)	Rent for Summer (Includes $4.00 Linen Service)
Burnam – phones	$130.00 148	$65.00
Case No	130.00 135	65.00
McGregor	140.00	70.00
Sidney Clay	140.00	70.00
Sullivan	130.00	65.00
Telford Hall	140.00	70.00
Walters	140.00	70.00
Residence Halls for Men		
Combs	$140.00	$70.00
Dupree	140.00	70.00
Keene Hall	140.00	70.00
Keith	130.00	65.00
Martin	130.00	65.00
Mattox	130.00	65.00
Miller, Beckham, and McCreary	130.00	65.00
O'Donnell	130.00	65.00
Palmer	140.00	70.00
Todd	140.00	70.00
Commonwealth	140.00	70.00
Telephone Service (if available) Per Student	$12.00	$6.00

All charges are subject to change without notice.

RESIDENCE HALLS

POLICIES

All students desiring housing at Eastern Kentucky University should complete an application for a room reservation and forward it to the Bursar's Office, Office of Business Affairs, Eastern Kentucky University, Richmond, Kentucky.

An advance rental payment of $50.00 should accompany the application. This payment is necessary before a reservation will be made. It will be applied to the rent for the first semester following enrollment. The advance payment will be refunded in full if cancellation is received by July 15 for the first semester, December 15 for new students for the second semester, or May 15 for the summer term respectively.

Reservations will be held only through the day preceding the first day of classes, unless students have made arrangements with the Residence Hall Director for late arrival.

Partial refunds of rentals after a room is accepted may be made only in exceptional instances. In no case shall a refund of rent be made to students moving from University housing at their convenience.

Room rent is paid by the semester, and is due and payable at registration.

registration.

REFUND POLICY

Refunds on fees and room rental charges, when authorized, shall be made on a schedule based on the time elapsed during the semester or summer term. During the semester, refund of a portion of the fees and room rental paid shall be made as follows: first and second weeks, 75%; third and fourth weeks, 50%; fifth and sixth weeks, 25%. After six weeks no refunds will be made. During the summer term, the following schedule will determine the portion refunded: first week, 75%; second week, 50%; third week, 25%. After three weeks, no refund will be made. (For the purpose of this calculation, the week will begin with the first day of registration for the semester or summer term.)

The percentage of refunds shall apply to all fees and room rentals paid, except that no refund can be made on fees collected for student insurance premiums, class dues, and similar fees.

No refund will be made for reduction of course load unless it results from cancellation of a class or the student having been permitted to enroll in a course for which he was not eligible. Refunds for reduction of course load must be approved by the Vice President for Academic Affairs.

FOOD SERVICE

The University operates several food service facilities on the campus. Large, air-conditioned cafeterias in the Johnson Student Union Building, Martin Hall, and Sidney Clay Hall serve attractive, wholesome meals at reasonable prices. Students purchase food on an individual meal basis. In addition, snack bars are located in the Johnson Student Union Building, Case Hall, Martin Hall, Mattox Hall, and Weaver Health Building.

OFFICE OF STUDENT AFFAIRS

Through the Office of Student Affairs, the University relates to students the various aspects of campus life. Some of the more specific areas are: (1) admission and re-admission; (2) orientation of freshmen and transfer students; (3) physical and mental health of students; (4) coordination of student activities and clubs; (5) on-campus and off-campus living; (6) maintenance of personnel records; (7) operation of a student counseling center; (8) registration; (9) foreign student advisement; (10) social programs; (11) veterans affairs; and (12) student financial assistance.

The entire University faculty and administrative staff assists in various aspects of student personnel work co-ordinated through the Office of the Vice President for Student Affairs. Students are encouraged to become responsible citizens not only at Eastern but also in later life as citizens of communities, citizens of a democracy, and professional people. Immediate emphasis is directed toward those activities which assist students in attaining maximum personal, social, and academic growth in a stimulating environment.

STUDENT HEALTH SERVICES

The mental and physical health of Eastern students is administered by the University Physician and his staff. The Infirmary is open during regular school hours, and a nurse is available for emergencies which might arise after regular office hours. The Infirmary has 10 beds for short-term illness or overnight care, when required. Serious illness or required surgery will be referred to the new Pattie A. Clay Hospital, adjacent to the campus, at the patients expense.

All new students must have a physician perform a complete physical examination and complete a medical record which is furnished the student when admissions information is being filed. The Medical Record is a part of admissions; and after the student is admitted to the University, the Medical Record becomes a part of the student's health folder and is filed at the University Infirmary. With this information, it is possible to be of greater assistance to all full-time students who use the Infirmary services.

In addition to Student Health Services, the University provides instruction in first aid, personal hygiene, safety, and community hygiene.

COUNSELING CENTER

The University Counseling Center has a staff of full-time counselors to assist students with problems of educational-vocational goal planning, curricular choice, personal-social adjustments and serves as a referral agent for the University Psychiatric Services.

Counseling is a professional consultation and may include tests of intelligence, vocational interest, personality, aptitudes and/or educational skills. The Center is equipped to administer the various tests at no cost to the individual. The Center also maintains a file of vocational information which is easily accessible to the interested student.

Students may come to the Center on their own initiative or may be referred by teachers, advisors, or other University staff members.

Counseling records are considered professional information and are protected accordingly. Personal confidences are respected.

FINANCIAL ASSISTANCE

Scholarships

The William Davis Scholarship. Under the provisions of the will of the late William Davis of Newport, Kentucky, a sum of money was left for the benefit of the student living in the Lona Estella Davis school district of Rowan County. Scholarships of $200.00 each are awarded by the Superintendent of Rowan County schools and the President of Eastern Kentucky University. A student desiring to secure one of these scholarships should write to the Chairman of Student Aid Committee, Eastern Kentucky University, or make application to the Superintendent of Rowan County Schools.

The Lily Christopher Ogg McWhorter Memorial Fund was established in 1959, in memory of Mrs. Nina Ogg Peake and William Emery Ogg, graduates of Eastern, by their sister, Mrs. Lily Christopher Ogg McWhorter. They were all residents of Madison County. The income from this fund is to provide financial aid for persons of good ability but of little money.

In the field of Music there are three scholarships awarded annually to those students who make the most satisfactory progress in piano, voice, and violin.

Phi Delta Kappa Scholarship. The Eastern Kentucky University Chapter of Phi Delta Kappa, an education fraternity for men in education, awards a full tuition scholarship each year to a full-time male graduate student. Applications and information may be secured by writing to the Graduate Office. Applications must be submitted by July first of each year.

ROTC Scholarships. Under the provisions of Public Law 88-647 a limited number of two year ROTC scholarships are available for award to outstanding military students who have completed the basic ROTC course. These scholarships provide for payment of tuition, fees, book costs, laboratory expenses and subsistence pay of fifty dollars ($50.00) per month. Selection of individuals will be based on criteria established by the Secretary of the Army and by action of an on-campus board consisting of the Professor of Military Science and other representatives from the faculty.

Nursing Scholarship Program. The purpose of this program is to assist students of exceptional financial need to undertake courses of study leading to careers in Nursing.

The maximum scholarship that may be received for any school year is $1,500, or the amount of your financial needs, whichever is the lesser.

For application forms, write the Office of Student Financial Assistance.

Student Loans

The National Defense Student Loan. This program provides loans for students whose family income and total assets place a limitation upon resources for educational purposes.

This is a low interest bearing, long term loan, interest free while in school, serving in the Armed Forces, with the Peace Corps, or with Vista, with a 3% interest charged during the repayment period. The borrower may discount 10% of the loan each year up to 50% of the total borrowed by teaching school, a 15% cancellation per year up to 100% of the loan is allowed for teaching services in an economically deprived area.

For further information and application forms, write the Office of Student Financial Assistance, Eastern Kentucky University.

Educational Opportunity Grants Program. The Higher Education Act of 1965 initiates a program of Educational Opportunity Grants to assist in making available the benefits of higher education to qualified high school graduates of exceptional financial need, and who would not be able to obtain the benefits of education without such aid. To qualify for the program, the student must be taking at least twelve semester hours of course work each semester and be an undergraduate in good standing.

This program is combined with other programs of financial assistance (the National Defense Loan Fund and the Work-Study Program) to the extent necessary to enable the student to meet his educational expenses.

It is the policy of the administration that prospective students should have a high school scholastic standing of "C" or better in order to apply for student financial aid. A statement from the student's principal or guidance counselor should accompany the application to verify the high school scholastic standing.

For further information and an application form, write to the Office of Student Financial Assistance.

Federally Insured Loan. Eastern Kentucky University is a participant in the Federally Insured Loan plan which endorses loans made by home town financial institutions to deserving individuals who are either currently enrolled or have been accepted for admission to Eastern Kentucky University. The application for such a loan must be endorsed by Eastern Kentucky University before submission to the bank or other financial institution.

Under this program a student may borrow up to $1,500 per academic year. To qualify for this assistance a student must be from a family whose adjusted income does not exceed $15,000 per year. Applications and further information for the Federally Insured Loan may be obtained from the student's hometown lending institution or by writing the Office of Student Financial Assistance.

Law Enforcement Grants and Loans. As authorized by the Omnibus Crime Control and Safe Streets Act of 1968.

Loans: The Law Enforcement Student Loan Program makes available a ten-year interest bearing (7%) note of up to $1,800 per academic year to full-time students enrolled in undergraduate or graduate programs leading to degrees in areas directly related to law enforcement. The loans may be cancelled at the rate of 25 percentum for each year of full-time employment in a public, state, local, or Federal law enforcement agency.

Grants: The Law Enforcement Student Grant Program makes available payment for direct expenses and may not exceed cost of tuition and fees. Beneficiaries must be full-time employees of a publicly funded law enforcement agency and must agree to remain in the service of the employing agency for a period of two years following completion of any course of study funded by a grant.

For further information and application, write the Office of Student Financial Assistance.

The Student Aid Society Inc. Loan Fund. This fund is designed to help worthy students complete their education. It has been augmented from time to time by gifts from different individuals and organizations and is being increased annually. Small loans are available to upper-class students who are currently enrolled. Those having high scholastic records will be given preference in the granting of loans. This fund makes it possible for a student to borrow a small amount of money on a personal note at a legal rate of interest. Students who desire further information concerning this fund should get in touch with the Chairman of the Student Aid Committee.

Nursing Student Loan Program. This program is intended to assist full-time students to achieve careers in Nursing by providing long-term, low-interest (3%) loans to help meet the cost of education.

A student may borrow up to $1,500 for an academic year, or the amount of their financial need.

This loan program carries a cancellation clause which would permit a full-time employed nurse to cancel up to 50% and up to 100% if employed in an area which has a substandard shortage of nurses.

Student Employment

There is opportunity for student employment, whereby a limited number of students may earn part of their expenses by working in the cafeteria, library, bookstore, post office, dormitories, administrative offices, University dairy and farm, maintenance department, and faculty offices. Some students may also secure part-time employment in Richmond stores, restaurants, and other businesses.

Student labor should be limited so that work hours will not take too much of the student's study time. While ten hours per week is an average labor load, circumstances may permit a student to work more hours. No student, however, should enter the University without sufficient money for the semester unless there is a definite guarantee of work to support him. For further information and application forms, write to the Office of Student Financial Assistance, Eastern Kentucky University.

The Work-Study Program. Under a grant from the Federal Government, made possible by the Economic Opportunity Act of 1964, eligible students may be employed on a part-time basis while in full-time employment at Eastern. This program supplements the part-time Institutional Program which has been in effect at Eastern for many years.

A student or prospective student from a low-income family is eligible for employment under the Federal Work-Study Program. The student must enroll for a minimum of twelve semester hours of course work each semester and maintain at least a "C" average.

Placement in jobs will depend upon the financial needs, skills, interests, and aptitudes of the student and the availability of positions open at a given time. Students may work up to 15 hours per week depending upon his needs. Payments are made to the student employee on a semimonthly basis.

Other Financial Assistance

The Veterans Program at Eastern Kentucky University is approved by the Veterans Administration for the education of veterans and their eligible dependents. Students concerned with veterans training should have, at the time of registration, a Certificate of Eligibility. This is secured from the Regional office of the Veterans Administration. The University is responsible for the completion of certain Veterans Administration forms and for the other necessary information about students who receive this aid.

If you have completed courses while in the Armed Forces, ask the Registrar about the possibility of receiving credit for such courses.

Vocational Rehabilitation

Vocational Rehabilitation for students with physical handicaps of various kinds may be approved. They may receive financial benefits as approved by the Department. Students who wish to consult with a representative relative to vocational rehabilitation should write the Department of Education, Department of Vocational Rehabilitation, Frankfort, Kentucky, for specific instructions.

Veterans Administration Benefits

War Orphans, Widows, Children, and Wives of Deceased and Disabled Veterans should contact the Veterans Administration, 600 Federal Place, Louisville, Kentucky. Application forms are available in the Student Financial Aid Office.

STUDENT ORGANIZATIONS AND ACTIVITIES

With its concern for the whole student, the University provides many services and activities. The mental and physical health, the social and academic well-being, and the desire to provide a more meaningful life experience for the student are goals of the entire faculty and staff.

The changing nature of the University community in its phenomenal growth precludes a complete listing of all organizations and activities that will be available during the year in this catalogue. Students will find the available organizations and activities listed in official campus publications such as the Student Handbook and in notices posted on bulletin boards and in the *Eastern Progress.*

SOCIAL ACTIVITIES

The University Center Board arranges a variety of social activities for the benefit of Eastern's students. Such activities as movies, dances, concerts, and parties are planned so the student can achieve maximum enjoyment. The School Calendar lists all approved social activities. The Director of Student Activities and Organizations and Dean of Women coordinate the activities on campus. Students have the opportunity to participate in a variety of leisure time activities.

STUDENT IDENTIFICATION CARD

Each full-time student who has paid the full fees for his first semester will be issued a personal identification card. This card entitles the student to admission to all University athletic contests on the campus and to certain other programs sponsored by the University. It must be carried by the student at all times for official identification on the campus, and all full-time students must have a validated ID card before registration is completed.

Each part-time student is issued a non-laminated card for identification purposes only. It is not valid as an activity card.

If a student ID card is lost before graduation, application for replacement is made at the Office of Student Affairs. A replacement fee of $10 is charged for a full-time student ID card.

ATHLETICS AND RECREATION

Eastern offers a fine and varied athletic and recreational program for both men and women students. It consists of three major programs: Intercollegiate Athletics, Intramurals for Men, and Women's Recreation Association activities for women.

Eastern Kentucky University is a member of the Ohio Valley Athletic Conference and the National Collegiate Athletic Association. The Ohio Valley Conference annually produces teams that have top ranking among universities and colleges in the United States. In addition to these conferences, representative teams from other parts of the country are scheduled. Intercollegiate competition is carried on in eight different sports. They are: football, basketball, swimming, tennis, golf, track, cross country, and baseball.

STUDENT ORGANIZATIONS

The student organizations, societies and clubs form an intrinsic part of the program of Eastern Kentucky University that fulfills academic, social and religious functions. The student organizations at Eastern offer varied activities to encompass the interests of all students.

Honor Societies: Alpha Phi Gamma, Alpha Phi Sigma, Alpha Psi Omega, Collegiate Pentacle, Cwens, Delta Sigma Rho, Eta Sigma Gamma, Kappa Delta Pi, Kappa Iota Epsilon, Iota Lamba Sigma, Omicron Alpha Kappa, Phi Alpha Theta, Pi Omega Pi, Pi Tau Chi, Polity Society, Psi Chi, Scabbard and Blade, Sigma Delta Pi.

Departmental Organizations: Accounting Club, Administrative Management Society, Agriculture Club, Alpha Zeta Kappa, American String Teachers' Association, Association of Childhood Education, Association of Law Enforcement, Association of the United States Army, Biology Club, Caduceus Club, Canterbury Club, Chemistry Club, Counter-Guerilla Raiders, Delta Omicron, Dietetics Club, EKU Association of Nurses, Graduate Counseling Association, Gymnastics Club, HPER, Home Economics Club, Industrial Education Club, Kappa Pi, Little Theatre Club, Military Police Company, Pershing Rifles, Phi Mu Alpha Sinfonia, Philosophy Club, Physics Club, Polymathologists, Sigma Tau Pi, Sociology Club, Soil Conservation Society, Student National Education Association, Women's Recreational Association.

Religious Organizations: Anglicans, Baptist Student Union, Church of Christ, Christian Science College Organization, Christian Student Fellowship, Deseret Club, Disciples Student Fellowship, Fellowship of Christian Athletes, Lutheran Students, Newman Club, Student Interfaith Council, Wesley Foundation, Westminster Fellowship, Young Women's Christian Association.

Class Organizations: The Freshman, Sophomore, Junior, and Senior classes each have organizations for the purpose of improving student life at Eastern.

Activity Organizations: Catalina Club, Campus Gold, College Republican Club, Varsity "E" Club, Eastern Dance Theatre, Eastern Progress Staff, EKU Grotto Club, EKU Karate Club, KYMA Club, Milestone Staff, Sin the Karate Club, Young Democrats Club.

Service Organizations: Alpha Sigma Upsilon, Circle K International, Kappa Delta Tau, Men's Interdormitory Council, Student Association, Women's Interdormitory Council, Women's Officiating Services.

Other Student Organizations: Black Student Union, Ciruna, International Students Association, Inter-fraternity Council, Pan-Hellenic Council.

Social Sororities: Alpha Delta Pi, Alpha Gamma Delta, Chi Omega, Delta Theta, Kappa Delta, Kappa Phi Delta.

Social Fraternities: Alpha Chi Alpha, Beta Omicron Gamma, Delta Upsilon, Kappa Alpha, Omega Phi Psi, Phi Delta Theta, Pi Kappa Alpha, Sigma Chi, Sigma Nu, Tau Kappa Epsilon, Theta Chi.

CULTURAL ACTIVITIES

Every effort is made at Eastern to surround the students with cultural advantages. The programs presented are planned as part of the student's education and much time and effort is put forth to provide programs that will be of benefit to students.

Assemblies are held regularly and special assemblies are held when the occasion warrants. While programs at these assemblies are designed primarily for the students and faculty, visitors to the campus are welcome to attend. Programs planned for these assembly periods include appearances by nationally recognized lecturers and artists. Programs are provided on other occasions by lecturers or musical groups which have relationship to the University. Many fine programs are furnished by the Music Department of the University. Important University matters are officially presented to the student body by the President.

Freshmen are required to attend assembly as a part of their orientation course.

Concert Series are presented through the University Center Board. Some concerts are done in co-operation with the Community Concert Association. Students are admitted to these excellent programs without charge, but they must present identification cards for admission. These programs feature some of the outstanding individuals and groups in the nation.

Art Exhibits, arranged by the Art Department, are on continuous exhibition in the Art Gallery, Cammack Building. Every effort is made to include in the exhibits the works of major artists, past and present, from across America and around the world. Also included are the works of art students, art majors, and faculty. In addition, special exhibits are sometimes arranged for showing in the Student Union Building.

Church Affiliation is recognized as an important factor in the life of any student. Eastern is a state-supported institution and is, therefore, non-denominational. The University has a basic objective in helping to develop ethical character among all students. There is close cooperation between the institution and several fine churches in Richmond. Students are encouraged to attend church services in town. Eastern makes spaces available for several student church organizations to meet on the campus.

Presently, three downtown churches have student centers adjoining the campus. Other student centers will be built in the near future on sites which have already been purchased.

Plays presented by Eastern Little Theatre are a significant contribution to Eastern's cultural life. Three major productions each year, along with studio productions, and a drama program in the summer, provide numerous opportunities in acting, directing, and technical theatre. Participation in every aspect of the theatre program is open to all students.

STUDENT PUBLICATIONS

THE EASTERN PROGRESS, weekly student newspaper, is the official student publication of the University, and all students are encouraged to take advantage of the journalism training offered by the Progress.

THE MILESTONE is the University yearbook. Published annually, this publication contains photographic and statistical records of events of the University year. The book is distributed during the last two weeks of the spring semester.

Both the PROGRESS and the MILESTONE have received numerous national awards in recent years and are ranked annually among the top student publications in the nation.

AURORA (formerly BELLES LETTRES) is a magazine of student writing published by its student staff in cooperation with the English Canterbury Club, an organization of English majors and minors who meet monthly to encourage interest in literary activity.

AURORA accepts poems, one-act plays, short stories, prose sketches, and essays from any Eastern student. Cash prizes are awarded for the best works at the time of the spring publication.

STUDENT AWARDS

The Delta Alpha Chapter of Kappa Delta Pi annually presents two cash awards to the outstanding sophomore man and woman with the highest scholastic standing who plan to enter the teaching profession.

The Dr. Russell I. Todd Award is presented annually at the June commencement to the Eastern student judged to have made the most worthy and constructive use of his or her academic and leisure time. A faculty committee appointed by the President will select the recipient of this monetary award.

The Friendship Cup is awarded each year at Honors Day ceremonies by an anonymous donor. The award is a mint julep cup on which is inscribed the student's name under the words "Friendship Cup." The Student Council makes the selection each year of the most friendly student on campus.

The Gladys Perry Tyng Award for excellence in elementary education is presented annually by the College of Education to a senior man and woman. The certificates of award are given in honor of Mrs. Tyng, who was associated with the elementary education program at Eastern as professor of education from 1920 to 1961.

The Charles F. Weaver Fund is a fund of $1,000.00 established by the late Charles F. Weaver, long-time member of the Board of Regents, to encourage proficiency in oratory and home economics. The income from the fund is used to provide prizes to be awarded annually to the male student who excels in oratory and to the female student who has made the greatest advance in the field of home economics. The recipients are selected by a faculty committee.

The W. L. Keene Award for Oratory was established by Eastern in 1964. The award is given to the woman student who excels in oratory. The award is comparable to the Weaver Oratorical Award for men. Any woman student at Eastern may enter the oratorical contest. The award was named in honor of W. L. Keene, professor of English at Eastern.

The Roy B. Clark Award is made possible by the will of the late Roy B. Clark, head of the English department for many years. The income from money left by Dr. Clark is to be awarded annually to the student who writes the best prose fiction published in Aurora.

The Anna D. Gill Award is a fund established in memory of Miss Anna D. Gill, long-time faculty member of the College of Business. The income from this fund will be awarded annually to the outstanding senior business student.

A Student Service Award is presented annually by members of the Young Women's Christian Association to that member of the graduating class who, during his or her four years at Eastern, has given the greatest measure of service to fellow students.

The Yeager, Ford & Warren Award is for the purpose of stimulating an interest in the study of accounting and related subjects and encouraging the entrance of young men in the field of professional accounting. The $100.00 award is given at the end of the junior year to the student selected by the College of Business as most likely to succeed in the practice of public accounting.

STUDENT AUTOMOBILES

Space limitations for parking at the University require that all motor vehicles operated at the University be registered. Students registered as sophomores, juniors, seniors, and graduate students who have an overall academic standing of 2.0 or above may be granted the privilege of registering and operating an automobile at the University. Students registered as freshmen, regardless of the number of terms they have attended college, are forbidden to possess and/or operate motor vehicles at the University. All students on academic probation, regardless of their classification, are forbidden to possess or operate motor vehicles at the University. Exceptions to motor vehicle regulations may be granted only with special permission from the Director of Safety and Security in order to avoid hardship based upon physical handicap, necessary commuting to classes, the use of car for essential work, or other proven need. An eligible person desiring to register a motor vehicle must present the following documents: a valid operator's license for the type of vehicle to be registered, proof of insurance against public liability claims and property damage in accordance with the standards of minimum coverage set by the Bureau of Insurance of Kentucky, proof of ownership must be presented, and the motor vehicle must meet the safety standards prescribed by the Kentucky Department of Public Safety. Students who violate the motor vehicle regulations are subject to assessment for violating the policy and in the more serious cases are subject to possible suspension from the University.

PLACEMENT OFFICE

The Placement Office is maintained by the University and is a free service to assist students and alumni in obtaining positions in schools, business, and industry. Its concept is that it only helps job candidates to meet employers; it does not guarantee a job for the candidate.

Each year, schools, industry, business, and government agencies come to this office searching for graduates with specific background, experience, and ability to fill their positions and vacancies.

The Placement Office has available up-to-date job listings in numerous fields. It offers the applicant opportunities to have interviews with numerous prospective employers.

The Placement Office prepares and distributes bulletins to those alumni who have filed a request. The bulletins list employment opportunities supplied by employers by letter, telephone, telegraph, or through their own placement bulletins.

Students receive the information via campus bulletin boards, department heads, and Alumni receive the listings by mail which they receive every two weeks.

THE ALUMNI ASSOCIATION

The Alumni Association of Eastern has as its purpose to promote fellowship among the graduates and to stimulate mutual interest and concern between the University and the Alumni. Eastern now has nearly 16,000 graduates. Many of these men and women hold more than one degree from the University. All Eastern graduates are members of the Eastern Alumni Association, "with all the rights and privileges appertaining thereto." All former students who have as much as a semester's work at Eastern, former faculty and staff members, are eligible for associate membership. The Alumni Association encourages all alumni to make an annual gift to the Alumni Fund each year. The minimum gift is $3.00, which serves as the "dues" for active membership in the Association. This is used by the Association's Alumni Office to help defray operating expenses. The remainder of any contribution will be used for the specific purpose designated by the contributor. Annual active membership is obtained by making an annual contribution of at least $5.00. Life memberships are $75.00 for single and $100.00 for joint memberships.

The Alumni Association sponsors Homecoming in the fall, KEA breakfast in the spring, and Alumni Day at commencement time. The latter features an Alumni Dinner honoring the 15, 25, 40, 50 and 60 year classes, and the presentation of an Outstanding Alumnus Award. In addition, active Alumni Chapters at Louisville, Greater Cincinnati, Ashland-Huntington-Ironton (Tri-State) area, Pulaski County, Pike County, Perry County, Harlan County, Breathitt County, Fayette County, McCreary County, Dayton and Hamilton, Ohio, Washington, D. C., and three in Florida, have numerous meetings throughout the year open to all alumni and former students in the area. Many more Eastern Alumni Chapters are expected to be installed in the future.

The Eastern Alumni Association is a member of the American Alumni Council and the Joint Alumni Council of Kentucky an organization made up of the alumni of the six state-supported institutions: Eastern Kentucky University, Morehead State University, Murray State University, Western Kentucky University, University of Kentucky and Kentucky State College.

The Eastern Alumnus, official magazine of the Alumni Association, is published each fall and spring by the Association for its members. Subscription is included in the membership dues.

The Alumni Office is conveniently located in the Mary Frances Richards Alumni House just off the campus on Lancaster Avenue where alumni and students may get bulletins and information. This is a good place for former students to find the addresses of their colleagues. Graduates, former students and faculty members are always welcome at the Alumni Office.

Alumni and Faculty are eligible for membership in the Arlington Association, a social and recreational club.

70/71 CATALOG

General Academic Information

. . . .

Admission to the University . 44

Academic Programs . 46

Academic Regulations . 58

ADMISSION TO THE UNIVERSITY

I. **Methods of Admission.**—Candidates for admission to Eastern may be approved in any of the following ways:

A. **High School Graduation.**

1. Students who graduate from an accredited high school may be admitted to the freshman class on the basis of an official transcript and a recommendation from the principal.

B. **By Special Approval.**

1. Students who have one unit less than the number required for high school graduation, with superior grades, may be admitted provided the high school principal recommends that the student is qualified to do college work.
2. Veterans who have a minimum of twelve units of high school work and have successfully passed the G.E.D. tests may be admitted provided their test at Eastern shows that they rank as high as the average freshman entering college.
3. Persons over 21 years of age who wish to pursue courses as special students without reference to graduation may be granted the privilege if they have adequate preparation for the courses desired.

C. **With Advanced Standing.**

1. Students who have attended other colleges or universities are admitted to the University upon presentation and approval of credits from accredited institutions. So that proper evaluation and acceptance can be made, applicants transferring from other colleges and universities should present their applications at least ten days prior to the day of registration for the semester or summer term in which they plan to attend.
2. Credits earned at an accredited institution are evaluated on the basis of 2.0 ("C") average, and the maximum hours allowed are assigned on this basis. All courses attempted are recorded and the evaluation of such courses is at the discretion of the college dean. Only two hours of physical education activity courses may be accepted toward graduation.
3. A maximum of 67 semester hours may be accepted from an accredited junior college. The 67 hours shall include any work already completed in other institutions (including senior colleges) previous to the date of completion of work in the junior college. When a student has a total of 67 semester hours from one institution or from a combination of institutions, no additional work may be accepted for credit from a junior college. The student is advised to check with the Registrar of this institution before enrolling for work in any junior college after he has earned 60 semester hours.

4. Students transferring to Eastern Kentucky University beginning with the fall semester, 1970, shall be required to earn at Eastern a minimum of six (6) semester hours of credit in the major and to complete at least one course in the minor, if a minor is required.

5. CEEB Advanced Placement Program Credit—In cooperation with the College Entrance Examination Board's Advanced Placement Program, Eastern Kentucky University grants credit for CEEB approved high school advanced placement courses when a score of three (3) or higher is achieved on the appropriate CEEB EXAMINATIONS. Credit may be awarded in: American History, biology, chemistry, French, German, Latin, mathematics, physics, and Spanish.

II. **Applications for Admission.** – Applications for admission to the Eastern Kentucky University cannot be unconditionally approved until transcripts of credits are filed in the Admissions Office. As soon as possible after an Application for Admission and a Transcript of Credits are received, the candidate will be notified whether or not he is accepted.

It is the responsibility of the applicant to have the following items sent to the Admissions Office prior to the opening date of a term:

A. An application for admission, properly filled out by the applicant, should be made upon a regulation blank furnished by the Dean of Admissions.

B. All entering freshmen must submit scores on the American College Test (ACT). The American College Test should be taken on one of the five national testing dates during the student's senior year in high school. Each student should use the appropriate section of the ACT answer sheet to designate Eastern as a recipient of his scores. A student who fails to designate Eastern as a recipient of his scores at the time he takes the test may do so at a later date by writing the American College Testing Program and paying the late score transmittal fee. If an entering freshman has failed to take the ACT, he must take the ACT at the time designated during orientation week. This may delay his registration process.

C. A transcript of the secondary school credit, issued after graduation, should be mailed directly by the principal to the Dean of Admissions.

D. An official transcript of any college or university credits and a statement of honorable dismissal, regardless of whether or not the student received credit for the work, should be mailed directly to: The Dean of Admissions, Eastern Kentucky University, Richmond, Kentucky 40475.

E. Admission to graduate study is a process distinct from admission to an undergraduate program. Persons interested in graduate matriculation **including Eastern Kentucky University Alumni,** should make application to: Dean, The Graduate School, Eastern Kentucky University. **Two** official transcripts of credits not earned at Eastern Kentucky University should be mailed to The Graduate School to support application for admission.

ACADEMIC PROGRAMS

COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Baccalaureate Degree Programs

Areas of Concentration

Home Economics (teaching and non-teaching)
Industrial Education (Manual Arts Therapy, Industrial Arts Teacher Education, Vocational-Industrial and Technical Teacher Education)
*Industrial Technology (Drafting, Electronics, Graphic Arts, Metals)

Majors

*Agriculture
Home Economics (*General; Child Development: teaching and non-teaching; *Dietetics: administrative and therapeutic; *Food Service Administration; *Textiles and Design)
Industrial Education (Industrial Arts Teacher Education)
*Industrial Technology (Drafting, Electronics, Graphics Arts, Metals)
*Law Enforcement

Associate Degree Programs

Agriculture (Dairy Science, Agriculture Mechanization, Horticulture)
*Home Economics (Child Care, Food Service Technology, Homemaking Supervision)
*Industrial Technology (Applied Electronics, Broadcast Engineering, Drafting and Design, Electronics, Printing, Instructional Media)
Industrial Education (Vocational-Industrial and Technical Teacher Education)
*Kentucky School of Crafts (Vocational Crafts)
*Law Enforcement (General, Industrial Security, Juvenile, Corrections)
*Medical Assisting
*Medical Record Technology
*Nursing

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*non-teaching programs

COLLEGE OF ARTS & SCIENCES

Baccalaureate Degree Programs

Areas of Concentration

Art (teaching only)
English (teaching only)
Social Science (teaching only)
Music

Majors:

*Anthropology
Art
Biology
Broadcasting
Chemistry
*Drama
Earth Science (teaching only)
English
*Fisheries Management
French
Geography
*Geology
German
History
*Journalism
Latin
Mathematics
*Medical Technology
Music
Physics
*Philosophy
Political Science
Psychology (second major for teaching)
*Regional Planning
*Russian (teaching certificate with second major)
Spanish
Speech
Speech and *Drama
*Social Work
Sociology
*Wildlife Management

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*non-teaching only

COLLEGE OF BUSINESS

Baccalaureate Degree Programs

Bachelor of Business Administration degree (four-year)

Major:

- *Accounting
- *Economics
- *Electronic Data Processing
- *Finance
- *General Business
- *Management
- *Marketing
- *Office Administration (secretarial)

Bachelor of Science

Area in Business Education

Majors:

- Business Education—Accounting
- Business Education—General Business
- Business Education—Secretarial

Associate Degree Program

- *Executive Secretarial Program

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*non-teaching

COLLEGE OF EDUCATION

Baccalaureate Degree Programs

Areas of Concentration:

- ***Elementary Education (teaching only)
- Health, Physical Education and Recreation (teaching only)

Majors:

- Library Science (teaching only)
- **Physical Education
- *Public Health
- *Recreation
- *Rehabilitation Education
- School Health (teaching only)
- Speech Pathology and Audiology

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*non-teaching only

**A Corrective Theraphy emphasis (teaching only) is also available for male students

***Dual certification programs are available in special education, kindergarten education, and library science.

Associate Degree Program:

Recreation Supervision

THE GRADUATE SCHOOL

Master of Arts Degree

- English
- History
- Geography
- Non School Counseling & Guidance
- Student Personnel Services in Higher Education
- Political Science

Master of Arts in Education Degree

- Elementary Education
- Elementary Education—Reading
- Guidance and Counseling
- Library Science
- School Social Work
- Secondary Education
  - Art
  - Biology
  - Business Education
  - Chemistry
  - Earth Science
  - English
  - French
  - Geography
  - History
  - Home Economics
  - Industrial Education
  - Mathematics
  - Music
  - Physics
  - Physical Education
  - Political Science
  - Reading
  - Spanish
  - Special Education

Master of Business Administration Degree

Master of Music Education Degree

Master of Public Administration Degree

Master of Science Degree

- Biology
- Chemistry
- Clinical Psychology
- Criminal Justice
- Geology
- Industrial Education
- Industrial Technology

Physical Education
Physics
School Psychology

Specialist in Education Degree
Educational Administration & Supervision
Elementary Education
Physical Education
Physical Education for College Teachers
School Counseling & Guidance
Student Personnel Services in Higher Education

Specialist in Technology Degree

Fifth and Sixth Year Certification Programs for Teachers and School Service Personnel

Joint Doctoral Program in Education (Ed.D. and Ph.D. with the University of Kentucky)

TEACHER EDUCATION CURRICULA

The curricula offered by the University have been planned and developed to meet the needs of students who desire to become teachers, principals, supervisors, superintendents, attendance officers in the public schools, guidance counselors, and school librarians. Curricula are offered for the preparation of elementary teachers (options are available for library science, special education and kindergarten teaching); for teachers of the special subjects of art, business, health and physical education, home economics, industrial arts, music, and special education; for teachers of technical and industrial subjects in vocational schools; and for the preparation of secondary school teachers in fields of biology, chemistry, earth science, English, French, geography and geology, German, history, Latin, mathematics, physics, political science, psychology, Russian, social science, sociology, Spanish, speech, and speech and drama. These curricula lead to the Baccalaureate degree and the Master of Arts degree with right of certification.

ADMISSION TO THE TEACHER EDUCATION PROGRAM

Those who plan to work toward a teaching certificate must enroll in Educational Foundations 202, Professional Orientation. This enrollment should be in the Sophomore year. During this course the application for the teacher education program will be accomplished. Transfer students who have had a similar course prior to entrance to Eastern should enroll in Educational Foundations 300, Issues and Trends in American Education. This must be done during the first semester of residence. The requirements for admission to the teacher education program are: (a) one semester of residence at Eastern, (b) 2.0 grade-point average in all college work at Eastern, (c) satisfactory recommendations from four faculty members, one of which must be the instructor in Educational Foundations 202 or 300.

When a student has been admitted to the teacher education program, and not until then, he may enroll in the professional education sequence. No student will be enrolled in Educational Foundations 317, Human Development and Psychology, or subsequent education courses, without an admission card. If, after admission to the teacher education program, a student is placed on either academic or social probation, his application will be reviewed.

CURRICULUM REQUIREMENTS

Each curriculum shall require:

1. an area of concentration, or
2. two majors, or
3. one major and two minors, or
4. one major and one minor when credit in both is 48 semester hours (54 when English is included as a major.)
5. single major of 30 hrs. in approved teaching fields

Note: Effective September 1, 1972, all teaching majors must contain a minimum of 30 semester hours in the subject field and all teaching minors must contain a minimum of 21 semester hours.

SUPERVISED STUDENT TEACHING

Student teaching is done in the campus laboratory school or in affiliated public schools. Students wanting to do student teaching must file an application sixteen weeks prior to the term in which they are to do their student teaching.

ADMISSION TO STUDENT TEACHING

A student of senior standing may enroll in student teaching if he has satisfied the following requirements:

1. one semester of residence at Eastern and admission to the teacher education program;
2. completion of all prerequisites in professional education and major teaching field;
3. the recommendation of his major professor;
4. a standing of at least 2.25 grade-point average based on hours attempted at Eastern in his major/minor(s) and in his total program and a grade of not less than a "C" in EDF 202/300 and in EDF 317.
5. meets the generally accepted standards of a professional person relative to health, art of communication, personality, and other characteristics of a good teacher;
6. files an application for student teaching at least 16 weeks prior to the term in which student teaching is desired;
7. has on file a physical examination report.

No student who is pregnant may begin ELE 499 or ESH 499, Supervised Student Teaching.

PROVISIONAL ELEMENTARY CERTIFICATE

The Provisional Elementary Certificate valid for ten years shall be issued to a person who completes a baccalaureate degree and meets the requirements for teaching in the elementary schools. A minimum grade of "S" must be earned in student teaching in order for a student to be recommended by this institution for a teaching certificate. The Provisional Elementary Certificate is valid on a continuing basis provided the certificate is registered at the end of each ten-year period in the Division of Teacher Education and Certification of the State Department of Education on evidence of three years of teaching experience or twelve semester hours of additional graduate work.

The curriculum for the preparation of elementary teachers is given in the College of Education section of this catalog.

PROVISIONAL HIGH SCHOOL CERTIFICATE

The Provisional High School Certificate valid for ten years shall be issued to a person who completes a baccalaureate degree for the training of high school teachers. A minimum grade of "S" must be earned in student teaching in order for a student to be recommended by this institution for a teaching certificate. The Provisional High School Certificate is valid on a continuing basis provided that the certificate is registered at the end of each ten-year period in the Division of Teacher Education and Certification of the State Department of Education on evidence of three years of teaching experience or 12 semester hours of additional graduate work.

Courses of instruction leading to the Provisional High School Certificate are to be found under the material of the various academic departments.

CERTIFICATE RENEWAL

Kentucky teachers earning the bachelor's degree in May, 1967, and subsequently are required within ten years of graduation to renew the provisional teaching certificate through completion of a planned fifth year of study. This requirement may be met by completing one of the several master's degree programs offered at Eastern: the Master of Arts, Master of Science, Master of Music Education, or Master of Arts in Education. It may also be satisfied by completing an approved fifth-year non-degree program. Institutional recommendation for the Rank 2 Foundation classification is given persons completing either of these programs. Persons completing the Master of Music Education or Master of Arts in Education degree program are recommended for the standard teaching certificate.

Graduate offerings for teachers at Eastern include: guidance and counseling, library science, reading, health and physical education, school or clinical psychology, special education, music, elementary education, and the following secondary education areas: art, biology, business education, chemistry, earth science, English, French, geography, history, home economics, industrial education, mathematics, physics, political science, and Spanish. Programs are described in greater detail in the **Graduate Catalogue.**

ADVANCED CERTIFICATES

Eastern offers curricula for the certification of school principals and supervisors. A sixth year of study is available in most teaching areas, for school administrators (principals and supervisors, endorsable for the superintendency), and for guidance counselors. Individuals interested in a joint doctoral program in education should make application prior to enrollment in a sixth-year program.

PRE-PROFESSIONAL CURRICULA

Pre-engineering 172
Pre-forestry 173
Pre-medical and pre-dentistry 175
Pre-optometry 173
Pre-pharmacy 174
Pre-veterinary 174

PRE-LAW CURRICULUM

No fixed, comprehensive pre-law curriculum is usually prescribed in law schools. However, prospective law students should keep in mind that a broad, basic and liberal education will equip one to study law and also prepare him for a vital role in the community once he has acquired his professional training. Courses in accounting, economics, English, history Latin or a modern foreign language, mathematics, the natural sciences, philosophy, political science, psychology, sociology and speech lend themselves to the breadth of background needed by a law student and a lawyer.

The importance of a sound background in use of the English language cannot be stressed too greatly. A fundamental knowledge of grammar, a good vocabulary, an ability to read rapidly with understanding, an ability to express one's thoughts in a clear and organized fashion, are all absolutely essential to success in the study of law.

A pre-law student may either complete the degree requirements before applying for admission to a law college or in case of unusually demanding personal circumstances may apply for admission to a law college upon the completion of three academic years of undergraduate work. Eastern has arrangements with a number of law colleges whereby the freshman year in the law college can be transferred to Eastern and applied on the bachelor's degree. By this plan a student may earn both the baccalaureate and law degrees in six academic years. He must meet the following requirements to receive a bachelor's degree from Eastern:

1. He must gain at least 100 semester hours at Eastern, with a standing of 2.3 or more, before transferring to a law school.
2. He must have met the general education course requirements.
3. He must have completed at least 21 semester hours in a major and 15 semester hours in a related minor.

4. He must have been officially registered at this institution at least one full year, thirty-six weeks, immediately preceding the completion of his requirements in this institution, and must have completed at least 36 semester hours in residence at this institution.
5. He must spend at least one academic year in a College of Law approved by the Association of American Law Schools.
6. He must secure sufficient hours in his law courses to bring his total up to 128 semester hours and must secure a standing of at least 2.0 or its equivalent in his law courses.

Pre-law students can major in the following areas: accounting, anthropology, economics, English, foreign language, history, management, political science, psychology and sociology.

Academic advising is done by the departments involved, however, the contact person for the Association of American Law Schools is the chairman of the Political Science Department.

OTHER PRE-PROFESSIONAL CURRICULA

The University affords courses for students who plan to do specialized work in nursing, library science, theology, and other professional fields.

In addition to standard four-year pre-professional curricula, Eastern may approve specially arranged combined curricula. In these curricula, the student completes three years as outlined at Eastern to meet basic requirements and then transfer a year of successful work from a highly rated professional school in order to secure a B. S. or A. B. degree from Eastern Kentucky University. This plan may shorten by one year the time needed for obtaining both a baccalaureate and a professional degree.

GENERAL EDUCATION REQUIREMENTS

BACCALAUREATE DEGREE PROGRAMS

AREA I. English Composition—the following six semester hours are required:

1. GSE 101—3 semester hours
2. GSE 102—3 semester hours

AREA II. Humanities—twelve semester hours

A. The following six semester hours are required:

1. ENG 209 or 211—3 semester hours*
2. ENG 210 or 212—3 semester hours**

*GSH 126 may meet this requirement in certain specified cases.

**GSH 230 may meet this requirement in certain specified cases.

B. Six semester hours from the following as specified by departments:

1.	ART 200	3 semester hours
2.	ART 390	3 semester hours
3.	ART 391	3 semester hours
4.	ART 392	3 semester hours
5.	DRA 100	3 semester hours
6.	Foreign language	6 semester hours
7.	GSH 124	3 semester hours
8.	GSH 126	3 semester hours
9.	GSH 228	3 semester hours
10.	GSH 230	3 semester hours
11.	HIS 398	3 semester hours
12.	HIS 399	3 semester hours
13.	MUS 271	3 semester hours
14.	MUS 371	3 semester hours
15.	MUS 372	3 semester hours
16.	PHI 110	3 semester hours
17.	PHI 130	3 semester hours
18.	PHI 240	3 semester hours
19.	PHI 300	3 semester hours
20.	PHI 301	3 semester hours

AREA III. Social Sciences—twelve semester hours

A. The following six semester hours are required:

1. GSS 246 or HIS 202—3 semester hours
2. GSS 247 or HIS 203—3 semester hours

B. Six semester hours from the following as specified by departments:

1. One course from the following group:
   ANT 202; ECO 230; GSS 142; GEO 101, 102, 210, or 345; POL 100; SOC 231.

2. One course from the following group:
   ANT 110; ECO 231; GSS 144 or 248; GEO 346, 402, or 422; POL 101 or 300; SOC 335 or 337.

AREA IV. Mathematics and natural science—twelve semester hours from the following as specified by departments:*

1. Biology: GSC 261 or 262; BIO 131, 141, 161, 162, 301, 305, 317, 403, or 404.
2. Chemistry: GSC 171, or 172; CHE 101, 102, 111, or 112.
3. Geology: GLY 108, 109, 210, 302, or 390.
4. Mathematics: MAT 107, 109, 200, 207, or 211.
5. Physics: PHY 131, 132, 176, 201, 202, or 230.
6. Non-specialized science: ANT 201; SCI 310.

*A student must have 3 semester hours in biological science and 3 semester hours in physical science. At least 6 of the 12 hours must afford the student laboratory experience.

AREA V. Physical Education and Health—the following 5 semester hours are required:

1. GSP 180—1 semester hour
2. GSP 181—1 semester hour
3. GSP 281—3 semester hours

AREA VI. Military Science (Male Students)

Male students beginning their college program at Eastern prior to June 1, 1969, are required to complete satisfactorily MIL 101-102 and MIL 201-202. Those beginning after June 1, 1969, must complete MIL 101-102 and MIL 201-202 or designated optional courses in lieu of MIL 201-202. Exceptions to this requirement and its application to students entering with advanced standing are explained on pages 71-72.

Options to MIL 201-202

1. Any course(s) listed above under Areas II, III, IV, V not being applied to other general education, major, or minor requirements.
2. Any of the courses listed below which are not being applied to major or minor requirements.
   requirements.
   BIO 171, ENG 214, ENG 215, GEO 341, GEO 343, HEA 315, HIS 305, MAT 111, MAT 272, NFA 201, PHI 350, PHI 360, PHY 100, POL 201, POL 202, PSY 212, SOC 355, SPE 100, SWK 210.

Restrictions on Options to MIL 201-202:

1. Must yield at least 4 semester hours credit.
2. Must be taken in the semester(s) in which MIL 201-202 would otherwise be required.
3. Must be identified as options at the time of registration.
4. **Cannot be taken on a "Pass-Fail" basis.**

ASSOCIATE OF ARTS DEGREE

All programs of study leading to the Associate of Arts degree include at least twelve (12) semester hours of general education courses. These include GSE 101 and GSE 102, English Compositions, plus six (6) additional hours to be selected from the courses approved for general education.

These six additional hours must represent two different areas (see Central University College General Education Requirements—Areas II, III, IV, and V). SPE 100, Oral Communication, may be counted as a general education requirement in Associate Degree programs. All male students not otherwise exempt must take the following ROTC Military Science courses: MIL 101, 102, 201 (or option) and 202 (or option).

COURSE PREFIXES

ACC—Accounting
AGR—Agriculture
ANT—Anthropology
ART—Art
BED—Business Education
BIO—Biology
CHE—Chemistry
CRJ—Criminal Justice
DRA—Drama
EAD—Educational Administration
ECO—Economics
EDF—Educational Foundations
EDP—Electronic Data Processing
ELE—Elementary Education
ENG—English
EPG—Guidance
EPY—Educational Psychology
ESH—Secondary and Higher Education
FIN—Finance
FRE—French
GBU—General Business
GEO—Geography
GER—German
GLY—Geology
GRE—Greek
GCC—General College Colloquium
GSC—Science
GSE—English Composition
GSH—Humanities
GSL—Learning Laboratory
GSO—Orientation
GSP—Physical Education and Health
GSS—Social Science
HEA—Health
HEC—Home Economics
HIS—History
IED—Industrial Education
INT—Industrial Technology
JOU—Journalism
KYC—Kentucky Crafts
LAT—Latin
LEN—Law Enforcement
LIB—Library Science
MAT—Mathematics
MGT—Management
MIL—Military Science
MKT—Marketing
MRS—Medical Records
MUS—Music
NFA—Nutrition Foods and Food Administration
NUR—Nursing
OAD—Office Administration
PHE—Physical Education
PHI—Philosophy
PHY—Physics
PLA—Regional Planning
POL—Political Science
PSY—Psychology
REC—Recreation
REL—Religion
RHB—Rehabilitation Education
RUS—Russian
SCI—Science
SED—Special Education
SOC—Sociology
SWK—Social Work
SPA—Spanish
SPE—Speech
TRS—Traffic Safety

COURSE NUMBERING

Courses are numbered according to the following plan:

Courses numbered 100 to 199 are primarily for freshmen.

Courses numbered 200 to 299 are primarily for sophomores.

Courses numbered 300 to 399 are primarily for juniors.

Courses numbered 400 to 499 are primarily for seniors.

Courses numbered 500 to 599 are for senior and graduate students.

Courses numbered 600 to 699 are for graduate students only.

A student may not take a course numbered more than one year below or above his classification level except with special permission from his advisor and the chairman of the department offering the course.

SEMESTER WHEN COURSES ARE OFFERED

I, II, and A used in the description of a course indicates the course will be offered the fall semester, spring semester, and by announcement, respectively.

ACADEMIC REGULATIONS

Catalogue Applicable.—A student will be governed by the catalogue in force during the school year in which he enters unless he interrupts his resident status at this institution for more than one calendar year, in which case he comes under the requirements of the catalogue in force at the time of re-admission. A student may elect to comply with the catalogue currently in force. Exceptions to this policy must be approved by the dean of the college in which the student is enrolled and by the Vice President of Academic Affairs.

Classification of Students.—Students shall be classified as indicated below upon the completion of the respective number of hours, provided that the student has removed all entrance conditions:

Freshman—Entrance requirements
Sophomore—30 semester hours
Junior—60 semester hours
Senior—90 semester hours
Graduate—Baccalaureate degree

Grading System.—Grades are indicated by letters, to each of which is given a certain value in "grade points". The following is the interpretation placed upon the grading system:

Grade	Meaning	Grade Points Per Semester Hour
A	Excellent	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure	0
I	Incomplete	0
S	Passing	0
U	Failure	0
W	Withdrew	0
WP	Withdrew passing	0
WF	Withdrew failing	0
CR	Credit only	0

A grade of "D" gives credit toward a certificate or a degree, if with such credits the student's standing is 2.0 or more. A grade of "I" shall be assigned if in the opinion of the instructor the student has been unable to complete the course on time because of unavoidable conditions. A grade of "I" must be made complete within one month after the student re-enters the University. A grade of "I" automatically becomes "F" if the course is not completed at the end of a year.

A student's point average is obtained by dividing the total number of points earned by the total number of semester hours attempted, exclusive of courses when "S" or "U" grades are assigned. Courses in which the marks are "CR", "W", or "WP" are recorded but are not figured in computing the point average. In order for a student to fulfill the requirements for a certificate or a degree, he must offer a number of "grade points" at least twice as great as the number of semester hours attempted.

Pass-Fail ("S" - "U") Option—The Pass-Fail option is made available to encourage students to take courses they might otherwise avoid because of lack of background or concern for lowering grade point standings:

1. Students who have earned 30 or more semester hours of credit with a minimum grade point average of 2.0 may choose the Pass-Fail ("S" - "U") option for a total of 15 hours of free electives. Courses taken under the Pass-Fail option must be exclusive of general education, major, minor, and other course requirements for graduation. Eligible courses must belong to the exclusive category, free electives. Hours attempted under the Pass-Fail option will not be used in the computation of grade-point averages.

2. Students may choose the Pass-Fail option for no more than one course with a maximum of five credit hours per semester.

3. Students may choose the Pass-Fail option or choose to make a change from the Pass-Fail option to the usual grading procedure only during preregistration, registration, or up to the last date given in each semester's schedule when courses may be dropped without a grade.

4. Students may choose the Pass-Fail option for free electives as indicated above, but the instructors for these courses will not be informed when students in their classes are under the Pass-Fail option. Instructors for all classes will turn in, as usual, the designated end-of-course grades, and the Registrar will convert the assigned letter grade to an "S" or "U" grade, as applicable.

Repeating Courses—The following regulations apply to repeated courses:

1. A transferred course which has been taken more than three times will not be accepted for credit.

2. A student may not enroll in the same course for a fourth time without permission of his academic dean.

3. The grade which is counted in a course that has been repeated is the last grade awarded regardless of whether it is higher or lower.

4. The credits attempted and quality points earned will be counted for each taking of a course, but credits earned will be counted only for the last taking.

For example if a student takes English 211 and makes a "D" and then repeats the course and makes an "A" the quality points, credit, and point standing would be as follows:

	Grade Received	Hours attempted at Eastern	Hours Earned	Quality Points
English 211	D	3	3	3
English 211	A	3	3	12
		6	3	15

The student would have 3 hours credit with a point standing of 2.50.

Minimum Scholastic Standards for Baccalaureate and Associate Degree Programs (Applicable first semester 1970-71 to both new and continuing students)—A student will be placed on academic probation anytime his cumulative grade point average falls below 2.0 on the 4.0 scale.

If a student's grade point average falls below the following levels he will be denied the privilege of reenrollment for at least one semester:

24-35 hours attempted	1.4 grade point average
36-63 hours attempted	1.6 grade point average
64-95 hours attempted	1.8 grade point average

A student who has attempted 96 or more hours in a baccalaureate degree program with a grade point average below 2.0 will be allowed to attempt a maximum of 32 additional hours to bring his average up to 2.0. A student who has attempted 96 or more hours in an associate degree program with a grade point average below 2.0 will not be permitted to reenroll.

A student who has been out of college for at least 12 months who has been pursuing a baccalaureate program and wishes to reenroll in an associate degree program may be permitted to enroll with the provision that grades for previous courses not applicable to the associate degree requirements will not be considered in determining his grade point average. If the student subsequently is permitted to enter a baccalaureate program, grades in all courses attempted will be included in the computation of the grade point average for the baccalaureate degree program.

Student Load.—The normal semester load for undergraduate students is 16 credit hours. The minimum load to be classed as a full-time student is 12 credit hours. A student who has established superior records may be permitted to enroll for more than 18 hours by the dean of the college in whch he is majoring. The maximum load is 21 hours.

A correspondence course taken while in residence is counted as a part of the student's load regardless of the institution with which the student does correspondence work. Six to nine semester hours is considered a normal load for a summer session, less than six being a part-time load and more than ten not normally permitted.

Auditing a Course.—A course may be audited, taken without credit, by permission of the instructor and the dean of the college. Registration procedures and fees are the same as for courses taken for credit.

Credit by Examination.—To recognize competence attained through educational experiences other than university instruction, it is possible to earn academic credit by examination in certain undergraduate courses designated by the departmental faculty. Conditions which apply to credit by examination are:

1. Only regularly enrolled undergraduate students are eligible for credit by examination. Although an examination may be taken at any time specified by the department chairman, credit earned will not be officially recorded until the student has completed at least 12 credit hours at Eastern with a minimum grade point average of 2.0.
2. The request for credit by examination is to be initiated by the student and approved by his adviser and by the chairman of the department offering the course.
3. Credit earned by examination may not be counted toward residence requirements.
4. Credit earned by examination is recorded without a letter grade; hence, it has no effect upon overall grade point average.
5. A student may attempt to earn credit by examination in a particular course only once.
6. Credit may not be earned by examination in a course which has been failed without the approval of the dean of the college offering the course.
7. A special fee of $10.00 per examination must be paid prior to taking an examination for credit.

Schedule Changes.—Changes in schedule which involve adding courses must be accomplished before the end of the first week of classes in a semester or within the first three days of classes in a summer session. Such changes must be approved by the adviser and the dean of the student's college.

A course can be dropped without a grade until the mid-point of the third week of classes in a semester or until the mid-point of the second week of classes in a summer session. Later dropping will result in the assignment of a "WP" or "WF" grade. No official dropping of classes is permitted within one month of the close of a semester or within two weeks of the close of a summer session.

If a student stops attending a class without officially withdrawing, he or she is subject to being assigned a grade of "F".

Withdrawal from the University.—Students who find it necessary to leave the university under any circumstances must visit the Office of the Dean of Students and secure an Official Withdrawal card. This card must be carried by the student to several campus offices, where records must be cleared. Unless the student follows this procedure, the permanent records in the Registrar's Office are incomplete. Therefore, students receive grades of "F" for the semester's work and will not be eligible for re-admission. Students failing to complete a Withdrawal Card within fifteen days will receive an unofficial withdrawal.

Class Attendance.—Faculty members have full responsibility for dealing with student absences from class, within the following limitations:

Any student with more than twenty per cent absences in a course shall be assigned an "F" grade. This policy may be waived for individuals in 100 and 200 level courses by approval of the instructor, department chairman and college dean. In courses above the 200 level, waiver may be effected by the instructor for individuals.

A student who presents the instructor with an adequate and documented reason for an absence normally will be given an opportunity to make up the work missed, if this is feasible. Adequate reasons involve circumstances beyond the student's control, such as personal illness, critical illness or death in the immediate family, or participation in an approved University activity. The responsibility for initiating the request to make up class work missed is vested in the student.

General Requirements for the Baccalaureate Degrees.—The mimimum amount of credit required for the bachelor's degree is 128 semester hours 43 of which must be in courses numbered above 299. A minimum grade point average of 2.0 is required on all work attempted at Eastern. Not more than 32 semester hours of the work required for a degree may be earned by extension and/or correspondence. A student who wishes to apply correspondence credit toward graduation must have all course work completed and the final examination taken as follows: January graduates by November 1 preceding, June graduates by March 1 preceding, and

August graduates by June 1 preceding. A candidate for a degree must have been in residence a minimum of 36 weeks and must have earned a minimum of 32 hours while in residence. At least 30 of the last 36 hours required for a degree must be earned in residence at Eastern. Transfer students may count toward a degree at Eastern only those credits approved by the dean of the college awarding the degree.

The curriculum which the student expects to follow for the completion of the requirements for the bachelor's degree must be filed in the office of the dean of the college in which the student is majoring not later than the end of the junior year. The curriculum must be approved by the major professor and the dean of the college. Students who change their major shortly before graduation may find that in the process their graduation may be delayed. A curriculum cannot be changed after fifteen days following the semester in which a student makes application for graduation.

Credits more than eight (8) years old may not be counted toward a Baccalaureate Degree without being validated by the dean of the college awarding the degree.

Requirements for a Second Baccalaureate Degree.—To be eligible for a second baccalaureate degree the student must meet all requirements for the second degree sought. Beyond the requirements for the first degree, he must complete a minimum residence requirements of 36 weeks and earn a minimum of 32 credit hours in residence with an average of at least 2.0.

Application for Graduation.—Students completing requirements for graduation in January should apply before the end of the preceding May; June and August graduates should apply by the end of the preceding November.

Commencement.—Commencements are held at the close of the spring semester and at the end of the summer session. Students who are candidates for degrees are required to participate in the commencement exercises unless excused by the President. A student who completes the requirements for a degree during the fall semester will receive the degree at the following spring commencement.

Commencement Honors.—Students are graduated "With High Distinction" who attain a standing of 3.6 or higher for at least three years of residence work.

Students are graduated "With Distinction" who attain a standing of 3.4 up to 3.6 for at least three years of residence work.

A student who completes only two years of work at Eastern may receive the appropriate commencement honors if he attains a standing of 0.2 greater than the above.

70/71 CATALOG

Academic Divisions

Central University College . 65

College of Applied Arts and Technology . 111

College of Arts and Sciences . 169

College of Business . 273

College of Education . 297

Graduate School . 335

Richmond Community College . 339

Continuing Education . 343

Central University College

. . . .

General Information . 66

General Studies Course Offerings . 68

Military Science . 71

Academic Programs . 75

CENTRAL UNIVERSITY COLLEGE

Clyde J. Lewis, Dean; L. L. Barlow, Associate Dean

This college which began operation in September, 1966, functions at the freshman-sophomore level to supervise and administer academic advising, student academic programs, and the general education curriculum.

The following regulations govern student academic affairs in Central University College:

1. All students entering the institution with less than 60 semester hours will be enrolled in Central University College. Those entering two-year and other less than baccalaureate degree programs sponsored by the other colleges will be enrolled for advising and record keeping only. Their other academic affairs will be administered by the colleges sponsoring the programs. Please see Richmond Community College for a listing of programs.
2. Central University College will be responsible for administering all academic affairs of its students who are preparing for four-year programs. Decisions involving academic probation, change of courses, student load, waiving of courses, granting credit by examination, etc., must be approved by the Dean of Central University College. Policy decisions in such matters, however, must be made in cooperation with the Dean of the College offering the course or courses. The Dean of Central University College will be responsibile for administering the academic advising of students enrolled in the College.
3. Students entering four-year programs and expecting to transfer to upper division colleges will be required to complete their work in Central University College within 22 hours attempted beyond the hours specified in their curricula for the first two years. Exceptions will require special approval from the Dean of Central University College. This approval may be recommended in specific terms by the Admissions Committee for students who are readmitted after having been previously dismissed for academic reasons.
4. Transfer from Central University College to an advanced college will require that students complete 64 semester hours with a 1.8 average, in addition to meeting the general education requirements of Central University College and the special admission requirements of the advanced colleges.
5. Central University College students will be permitted to take courses which will meet upper division requirements in an advanced college. Such courses will not be taken before the third semester in Central University College. In such cases, permission must be obtained from the Dean of the Advanced College.
6. Transfer students who have earned less than 60 semester hours of credit or transfer students who do not meet other admission re-

quirements for advanced colleges must enroll in Central University College until such requirements are met. Such students may take course work in the advanced college with permission of the Dean of the college in question.

7. Students in advanced colleges may take work at the Central University College level if they have permission of their Dean. However, except in special cases, they will not be permitted to take courses lower than the 200 level.

The College's Academic Advising Office provides services for most students enrolled in the college. Advisors are drawn largely from the academic faculties. They help students plan programs which permit achievement approaching a maximum of potential. The supervision provided here is meant to avoid the waste of time and effort that usually results from drifting through the first two years of college. Additional assistance for students enrolled in one- and two-year (Associate of Arts Degree) programs or having an interest in these programs may be obtained by contacting the Dean of Richmond Community College.

Central University College also provides an integrated curriculum which covers broad areas of knowledge, encompassing all the important fields needed by educated persons. These fields include experiences and understandings which are valuable to the individual and which will help the individual make his contribution to society. The program has been carefully designed to synthesize ideas so that emphasis is placed upon essential concepts rather than upon mere fact gathering. The core of the program includes 23 semester hours in English Composition, Natural Science, Social Science, and Physical Education and Health.* In addition, 24 more semester hours may be taken in general education course work required by the institution for graduation. This is a flexible program containing general education courses arranged in logical sequences along with adequate specialized and professional course work.

In addition to the general education courses, students in Central University College also take preparatory courses for specialized training in their major and minor fields. The course patterns meeting these requirements in the advanced colleges are shown in subsequent pages.

*Specifically, Central University College students must complete GSE 101 and 102; six hours of general education laboratory science; GSS 246 and 247 or HIS 202 and 203; GSP 281; and GSP 180 and 181.

GENERAL STUDIES COURSE OFFERINGS

ENGLISH COMPOSITION (GSE)

John M. Long, Chairman

GSE 101. (Formerly English 101) English Composition I. **Three hours.** I, II.
Review of the mechanics of expression; word study and use of dictionary; primary emphasis on composition; some practice in more effective oral communication, reading, listening, and thinking.

GSE 102. (Formerly English 102) English Composition II. **Three hours.** I, II.
Prerequisite: General Studies 101 (or equivalent).
Continued practice in composition; library paper; emphasis on reading and analysis, including the explication of literature.

HUMANITIES (GSH)

Bryan Lindsay, Chairman

GSH 124. Humanities I. **Three hours.** I.
The nature and significance of human subjective experience; the role of major disciplines in enriching and communicating that experience; exploratory investigations of selected familiar expressions in art, drama, literature, music, and philosophy; experience in self-expression.

GSH 126. Humanities II. **Three hours.** II.
Prerequisite: GSH 124.
An examination of humanistic expression selected from classic works in all cultures through the Renaissance. Experience in self-expression.

GSH 228. Humanities III. **Three hours.** I.
Prerequisite: GSH 126.
A continuation of GSH 126 to the end of the 19th century.

GSH 230. Humanities IV. **Three hours.** II.
Prerequisite: GSH 228.
The problem of "meaning" for contemporary man; the search for "meaning" in contemporary art, drama, music, literature, and philosophy; continuing experience in student self-expression.

BASIC PHYSICAL EDUCATION (GSP)

John Deck, Chairman

GSP 180. (Formerly Physical Education 115) Basic Physical Education. **One hour.** I, II.
A combination of lecture, assigned readings, and selected activities. Includes an interpretation of scientific data regarding the need for and biophysical values of muscular activity.

Activities for Men

Bowling
Dance
Physical Maintenance
Tennis
Volleyball
Golf
Soccer
Swimming
Tumbling
Apparatus
Wrestling
Badminton
Track and Field
Handball
Developmental Physical Education
Adapted Physical Education

Activities for Women

Body Form and Function
Bowling
Dance
Physical Maintenance
Tennis
Volleyball
Golf
Soccer
Swimming
Tumbling
Apparatus
Archery
Badminton
Track and Field
Field Hockey
Basketball
Paddle Tennis
Adapted Physical Education

GSP 181. (Formerly Physical Education 116) Basic Physical Education. **One hour.** I, II.

A continuation of GSP 180.

HEALTH (GSP)

Herman S. Bush, Chairman

GSP 281. (Formerly Health 201) Personal and Community Health. **Three hours.** I, II.

An interpretation of scientific findings in health concepts, nutrition, emotional health, family health, communicable diseases, addictions, physical fitness, environmental health and community health agencies. Emphasis placed on stressing intelligent self-direction of health behavior and acceptance for responsibilities in personal and community health.

NATURAL SCIENCE (GSC)

Wallace C. Dixon, Chairman

David Warriner, Associate Chairman; Martin, McLaren, Schaffer, Wernegreen

GSC 171. Physical Science A. **Three hours.** I, II.

(Not open to students who have completed college laboratory courses in physics.)

This course attempts to identify, analyze, and trace the historical development of basic principles in the world of inanimate natural phenomena. It gives attention to the principles of motion in the material world (from planets to electrons) and culminates with a consideration of electricity, light and the origin of material systems. GSC 171 should be followed by GSC 172, but it may be taken alone. Two lectures and one two-hour laboratory-discussion period.

GSC 172. Physical Science B. **Three hours.** I, II.

(Not open to students who have completed college laboratory courses in chemistry or geology.)

This course is designed to follow GSC 171. It will apply the basic principles introduced in the first semester to an understanding of atomic structure, chemical and nuclear energy, and the changing organization of materials in the earth, the atmosphere, and the universe at large. Implications affecting the welfare of man will be emphasized. Two lectures and one two-hour laboratory-discussion period.

GSC 261. Biological Science A. **Three hours.** I, II.

(Not open to students who have completed college laboratory degrees in biology).

This course attempts to integrate the life sciences, showing their dependency on each other as well as on the physical sciences. Emphasis is placed on the methods of biological science—their fruitfulness and limitations; problems unique to biology; the physical basis of life; the nature of an organism; selected examples of biological function in both plants and animals, stressing interrelationship; and population biology. This course is designed to be followed by GSC 262, Biological Science B; however, it may be taken alone. Two lecture hours and two laboratory hours.

GSC 262. Biological Science B. **Three hours.** I, II.

(Open only to students who have completed a one semester college biology course.)

This course is designed to follow GSC 261, Biological Science A, and will emphasize the following: variations in the levels of organization of both plant and animals; mechanisms for evolutionary change in organisms—their genetic base; the organism (especially man) and its environment; the role of man as an agent of change. Two lecture hours and two laboratory hours.

SOCIAL SCIENCE (GSS)

Kenneth Tunnell, Chairman

Barlow, Bennett, Biesinger, Boyd, Caldwell, A. Caldwell, A. Carlson, Chase, Clay, Curtis, Ellis, Everman, Krebs, C. Lewis, M. Lewis, R. Lewis, T. Lewis, McCord, Mylum, Nichols, Nyerges, Orchard, Roitman, A. Stebbins, Stone, M. L. Taylor, Webb.

GSS 142. Man, Culture, and Society. **Three hours.** I, II.

The scientific approach to man: attitudes, methods, concepts; basic terms of social science; biological and psychological foundations of human life; the dynamics of human change; patterns of cultural evolution; examples from non-literate cultures.

GSS 144. Contemporary Society. **Three hours.** I, II.

An introduction to basic economic and political concepts of modern society; 20th century economic and political ideologies and institutions; problems of economic systems and governments in meeting the challenges of the industrial world and modern technology; alternative economic and political systems; international relations.

GSS 246. Civilization I. **Three hours.** I, II.

Theories and concepts for the analysis of civilization; the emergence of preindustrial civilization; global patterns and examples of pre-industrial civilization; the preconditions of industrial civilization.

GSS 247. Civilization II. **Three hours.** I, II.

The developing pattern of industrial civilization in the 19th and 20th centuries: science, industrial capitalism, nationalism, war; the global spread of modernization; the United States and other appropriate examples of the growth of industrial civilization.

GSS 248. The Human Problem in the 20th Century. **Three hours.** I, II.

The contemporary crisis and decisions for the future: the revolution of technology; economic maladjustments; population growth and the depletion of resources; roots of contemporary collectivism; threats to personal liberty; conformity and mass psychology; personal and social disorganization; international anarchy and war; the question of human survival.

INTERDISCIPLINARY

GCC 399. College Colloquium. **Three hours.** A.

Crucial topics considered from an interdisciplinary viewpoint. The course is intended to demonstrate the complexity of the great human problems, while at the same time helping the student integrate knowledge from the scattered disciplines. The course is strictly elective and does not meet general education requirements as listed on pages 55 and 56.

MILITARY SCIENCE (MIL)

COL Pilant, Chairman

MAJ Adams, CPT Davis, MAJ Bell, MAJ Brewster, CPT Bruning, MAJ Casey, MAJ DiMichele, LTC Graham, CPT Hitchcock, LTC Nagle, MAJ Nichols, CPT Prehar, MAJ Randall.

Eastern Kentucky University maintains a unit of the senior division of the Army Reserve Officers' Training Corps (ROTC) under the provisions of the National Defense Act of 1916, as amended. The ROTC program is administered by the Military Science Department.

All male students entering the University in a status below that of second semester sophomore (less than 45 credit hours) must complete certain Military Science requirements specified in this section.

The complete Military Science program is four years in length. Its successful completion qualifies students to be commissioned in one of fifteen branches of the United States Army. Military Science cannot be considered a major or minor.

The four year program is divided into a two-year Basic Course and a two-year Advanced Course. The BASIC Course is normally taken in the freshman and sophomore years, and the ADVANCED Course is taken in the junior and senior years. Credit for the Basic Course is a prerequisite for the Advanced Course.

BASIC COURSE

The mission of the Basic Course (MIL I and MIL II) is to develop leadership potential, impart citizenship training, explore the functional relationships between the Department of Defense and other U.S. Departments and Agencies; and to stimulate and motivate students for future useful service in behalf of the Nation in whatever professions they choose. The basic aim is to develop in each student habits of cheerful and appropriate response to guidance and direction, loyalty, patriotism, self discipline, personal bearing, and poise.

Successful completion of the first year of the Basic Course (MIL 101-102) is a graduation requirement for all able-bodied male students entering the University as freshmen. Upon completion of MIL 101-102 these students must then complete either the second year of the basic course (MIL 201-202), or courses designated as options. These options are explained below. Students must enroll in the appropriate required course each semester until their requirements are satisfactorily completed.

Students electing to opt out of the second year of Military Science may do so by substituting, from a prescribed course listing, a combination of courses totalling at least 4 semester hours credit or a single 4-semester hour course. Courses so taken will count toward graduation only as having fulfilled the prescribed option to Military Science, that is, they may not be applied to satisfy specified course requirements in the students' major or minor fields nor in fulfillment of General Education Requirements. A student taking this option shall pursue the optional course(s) at the same time he otherwise would take Military Science, continuing, in successive semesters as applicable, until successful completion of the optional course(s). The course listings for this option are shown in Part III, General Academic Information, this Catalogue.

Male students transferring to Eastern have the following requirements in Military Science:

a. Those transferring with less than 30 hours are required to complete MIL 101-102 plus MIL 201-202 or options. (The same as newly enrolled freshmen.)

b. Those transferring with 30-44 credit hours are required to complete MIL 101-102 if they have not already done so.

c. Those transferring with 45 or more credit hours will be exempt from the Military Science requirement.

Students may be excused from the Military Science requirement under the following circumstances:

a. If not a citizen of the United States. (Exception by the Professor of Military Science.)

b. If under 14 years of age; or if cannot qualify for appointment as second lieutenant prior to reaching 28 years of age.

c. If medically unfit to perform general military service.

d. Students with prior military service or who have received ROTC training in high school or at another college or university will enroll at the level for which previous training qualifies them, or be excused from enrollment, as determined by the Professor of Military Science.

e. Unusual personal circumstances may allow excuse from the requirement in exceptional cases when recommended by the Professor of Military Science and approved by the Vice President for Academic Affairs.

For enrollment in the Basic Course, non-scholarship students must be physically capable of participation in a normal college physical education program. The physical examinations and medical records provided the University for admission (see STUDENT HEALTH SERVICES under INFORMATION FOR THE STUDENT, PART TWO, this Catalogue) will be used to determine whether students meet minimum medical fitness requirements. Scholarship students must undergo a complete physical examination which will be arranged by the Professor of Military Science at no expense to the student.

ADVANCED COURSE

The mission of the Advanced Course (MIL III and MIL IV) is to procure and motivate qualified college students for appointment as commissioned officers in the Army. The general objective is to produce junior officers who by education, training, attitude, and inherent qualities are suitable for continued development as officers in the Army. Intermediate objectives of the program are to develop in each student:

a. The fundamentals of self-discipline, integrity, and a sense of responsibility.

b. An appreciation of the role of a participating citizen in matters dealing with national defense.

c. The ability to evaluate situations, to make decisions, to understand people, and to practice those attributes considered essential in a leader.

Enrollment in the ADVANCED COURSE is limited to students who:

a. Have received credit for the Basic Course.

b. Have been recommended by the Professor of Military Science and approved by the President of the University.

c. Will receive their degrees prior to reaching 28 years of age. (Waivers may be granted to prior service men.)

d. Achieve qualifying scores on prescribed standardized tests.

(Transfer students without previous military training having credit for at least 45 semester hours, and having four semesters of college remaining may qualify for the Advanced Course by attending a six-week basic camp the summer prior to their prospective enrollment in the Advanced Course.)

Upon enrollment in the Advanced Course students must enter into a contract with the United States obligating them to complete the Advanced Course, attend Advanced Summer Camp and accept a commission in the United States Army if one is tendered.

Members of the Advanced Course receive subsistence pay of fifty dollars per month for a maximum of twenty months. They must attend a six-week Summer Camp at an Army post between their junior and senior years. During the encampment they are paid at the rate of one-half the base pay of a second lieutenant (currently about $300 for the six-week period). Subsistence, housing, uniforms and medical care are furnished without charge. A travel allowance to and from camp is also paid.

After completion of the Advanced Course and all degree requirements, cadets may be commissioned in one of fifteen branches of the Army. Fourth year cadets who have been designated "Distinguished Military Students" as a result of their achievements during the preceding three years may apply for a Regular Army commission. This opportunity is offered only to those students whose high leadership potential has been recognized, and who stand academically in the upper one-third of their Military Science class.

In addition to the military subjects required for completion of the Advanced Course, six semester hours of academic subjects which are germane to the professional qualification of officers must be completed. These subjects may be electives, or required in the student's academic program, however, prior approval by the Professor of Military Science is required.

Army ROTC Flight Training is available to fourth year cadets who meet the qualifications. This is a no-credit, extracurricular, training program, the successful completion of which qualifies participants for a private pilot's license. The program consists of approximately 75 contact hours of instruction. It is conducted at no expense to the student.

For enrollment or continuance in the Advanced Course, attendance at basic or advanced camp, initial enrollment in the scholarship program, participation in the Flight Program and commissioning, higher standards of medical fitness than those required for the Basic Course must be met. Physical examinations for these programs will be arranged for by the Professor of Military Science, and will be conducted at no expense to the student.

Basic Course (MIL I & MIL II)

MIL 101. The United States Defense Established Part I. **Two hours.** I, II.
History and organization of the United States Army; evolution of warfare; principles of war; marksmanship; mission and organization of combat units; leadership, drill and ceremonies.

MIL 102. United States Defense Establishment Part II. **Two hours.** I, II.
Role of Department of Defense agencies in national defense; national power and its relationship to our national objectives; small unit tactics; leadership, drill and ceremonies.

MIL 201. Introduction to Tactics and Operations. **Two hours.** I, II.
Map and aerial photograph reading; basic operations and tactics; leadership, drill and ceremonies.

MIL 202. American Military History. **Two hours.** I, II.
Survey of American Military history with emphasis on factors contributing to the development of military art as practiced by the U. S. Army; leadership, drill and ceremonies.

Advanced Course (MIL III & MIL IV)

MIL 302. Fundamentals and Dynamics of the Military Team I. **One hour.** I.
Organization, functions and missions of the arms and services; internal defense and development; leadership, drill and exercise of command; field training exercises.

MIL 301. Leadership and Management I. **Four hours.** II.
Principles and techniques of leadership and management; military teaching principles; small unit tactics; communications; drill and exercise of command; field training exercises.

MIL 401. Fundamentals and Dynamics II. **Four hours.** I.
Command and staff operations and functions; decision making; administrative management; military law; military intelligence; logistics; internal defense and development; leadership, drill and exercise of command; field training exercises.

MIL 402. Leadership and Management II. **One hour.** II.
The impact of world affairs on the Armed Forces of the United States; obligations and responsibilities of officers; leadership, drill and command; field training exercises.

ACADEMIC PROGRAMS

THE INITIAL SEMESTER

Central University College curricula prepare students for admission to major fields in upper division colleges of the University*. However, most preparatory curricula in Central University College do not require students to select a major until the opening of their second semester**. During the initial semester, they take a general program which includes 3-8 semester hours of electives. These elective courses should be selected carefully, in discussion with advisors and with a view toward wisely choosing a major field. The inital semester program is shown below.

Course	Hours
GSE 101	3
GSP 180	1
MIL (men) or elective (women)	2
General education options***	6-7
General elective	3-6
	15-19

*Two year pre-professional and terminal programs are outlined in the sections of the *Catalogue* which show the curricula of sponsoring departments in the advance colleges.

**Exceptions are: Agriculture, Art, Chemistry, Mathematics, Medical Technology, Music, Physics, Pre-Medical Science, Pre-Veterinary (see Biology), Speech Pathology and Audiology (see Special Education).

***Two courses from the following General Education Categories listed for Baccalaureate degree programs on pages 55-56, but only one course from one category.

1. Science and Mathematics
2. Humanities
3. Social Studies: ANT 110 or one course from Area III B 1.
4. Physical Education and Health: GSP 281

PREPARATORY CURRICULA

ACCOUNTING

Preparatory curriculum for a major in Accounting, College of Business

First Year

First Semester	Hours
GSE 101	3
GSO 100	1
GSP 180	1
MIL 101 (men) or elective (women)	2
Suggested general education options:	
General education mathematics or science*	3
Social Science	3
Suggested general elective:	
ACC 108	3
	16

Second Semester	Hours
ACC 108 or 109	3
General education mathematics or science*	3
General education social science, GSS 246 or HIS 202	3
GSE 102	3
GSP 181	1
MIL 102 (men) or elective (women)	2
	15

Second Year

First Semester	Hours
ACC 109 or 225	3
ENG 209 or 211	3
ECO 230	3
GSP 281	3
GSS 246 or 247; HIS 202 or 203	3
MIL 201 or option	2
	17

Second Semester	Hours
ACC 225 or 226	3
ECO 231	3
ENG 210 or 212	3
General education mathematics or science*	3
GSS 247, HIS 203**, or general education social science	3
MIL 202 or option	2
	17

*Six hours of laboratory science must be completed while the student is in Central University College.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

AGRICULTURE

Preparatory curriculum for a major in Agriculture (with a minor in Business), College of Applied Arts and Technology

First Year

First Semester	Hours
AGR 263	3
GSE 101	3
GSO 100	1
GSP 180	1
MIL 101	2
Agriculture*	8
	16

Second Semester	Hours
General education mathematics or science**	3
GSE 102	3
GSP 181	1
MIL 102	2
SPE 100	3
Agriculture*	4-5
	16-17

Second Year

ACC 108	3	ACC 109 or business*	3
General education mathematics or science**	3	General education mathematics or science**	3
GSS 246 or HIS 202	3	GSP 281	3
MIL 201 or option	2	GSS 247 or HIS 203	3
Agriculture*	4-5	MIL 202 or option	2
		Agriculture*	4-5
	15-16		18-19

*Courses to be selected with approval of advisor.

**General education science or mathematics options with approval of advisor. Note that six hours of laboratory science must be completed.

ANTHROPOLOGY

Preparatory curriculum for a major in Anthropology (non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ANT 110 or 201	3
GSO 100	1	GLY 108, 109, or 210	3-4
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		MIL 102 (men) or elective (women)	2
ANT 110	3	Elective	3
Biology 141 or 162	3-4		
Suggested general elective:			
Foreign language	3		
	16-17		15-16

Second Year

ANT 201 or 202	3	ANT 202 or SOC 231	3
ENG 209 or 211	3	ENG 210 or 212	3
GSP 281	3	GSS 247 or HIS 203	3
GSS 246 or HIS 202	3	MIL 202 or option	2
MIL 201 or option	2	PSY 213 or general education elective*	3
PSY 211 or general education elective*	3	Elective**	3
	17		17

*To be selected in consultation with advisor.

**Six hours of general education laboratory science must be completed while the student is in Central University College.

ART

Preparatory curriculum for an area in Art (teaching), major in Art (teaching), or major in Art (non-teaching), Colleges of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
ART 100	3	ART 101	3
ART 102	3	ART 103	3
General education social science elective (Area III B 1)	3	General education laboratory science	3
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	GSS 246, HIS 202, or optional elective*	0-3
MIL 101 (men) or elective (women)	2	MIL 102 (men) or elective (women)	2
	16		15-18

Second Year

EDF 202, PSY 211*, GSP 281**, or elective	3	EDF 202, PSY 211*, GSS 247, HIS 203, or elective	3
General education laboratory science	3	General education literature	3
GSS 246 or 247; HIS 202 or 203	3	GSP 281** or elective	3
MIL 201 or option	2	MIL 202 or option	2
Required art*** and/or elective	6	Required art*** and/or elective	6
	17		17

*Students who expect to qualify for teaching certificates within four years must complete GSS 246 or HIS 202 in the second semester of the freshman year and complete both EDF 202 and PSY 211 in the sophomore year. GSS 246 and 247 or HIS 202 and 203 must be completed in Central University College.

**GSP 281 must be completed while the student is in Central University College.

***To be selected from ART 203, 204, 227, and 229, with approval of advisor.

BIOLOGY

Preparatory curriculum for majors in Biology (teaching or non-teaching), or Fisheries Management or Wildlife Management, Colleges of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Biology**	4
GSO 100	1	CHE or MAT*	3-5
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246, HIS 202, or general education social science	3
Social science	3	MIL 102 (men) or elective (women)	2
BIO 131 or 141	4		
Suggested general elective:			
CHE or MAT*	3-5		
	17-19		16-18

Second Year

Biology**	0-4	Biology**	0-4
CHE or MAT*	3-4	CHE or MAT*	3-9
General education humanities, EDF 202, or PSY 211***	3	General education humanities, EDF 202, or PSY 211***	3
GSP 281	3	GSS 247,**** HIS 203, **** or other general education social science	3
GSS 246 or 247; HIS 202 or 203	3	MIL 202 or option	2
MIL 201 or option	2		
	14-19		15-19

*To be selected with the approval of the advisor from the following: CHE 111, 112, 213; MAT 107, 109, 111, and 207.

**To be selected with the approval of the advisor from the following: BIO 131, 141, 211, 221, 242, 315, 316, 325, 330, or 381.

***EDF 202 and PSY 211 must be completed by students seeking teaching certificates.

****GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

Preparatory curriculum for a major in Pre-Forestry, Department of Biology, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	BIO 131 or 211	4
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSS 246, HIS 202, or general education social science (Area III B 1)	3
Suggested general education options:		MAT 109, 111, or 112	4-5
BIO 131	4	MIL 102 (men) or elective (women)	2
Social science	3		
Suggested general elective:			
MAT 109 or 111	4-5		
	18-19		17-18

Second Year

CHE 111	4	CHE 112	5
BIO 211 or general education literature	3-4	GSP 281	3
GSS 246 or 247; HIS 202 or 203	3	GSS 247, HIS 203*, or general education social science (Area III B 2)	3
MAT 111, 112, or elective	4	MAT 112 or general education literature	3-4
MIL 201 or option	2	MIL 202 or option	2
	16-17		16-17

*GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

Preparatory curriculum for a major in Pre-Veterinary Medicine, Department of Biology, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
BIO 141	4	BIO 211	4
CHE 111	4	CHE 112	5
Foreign language	3	Foreign language	3
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2		
	18		18

Second Year

CHE 213	4	AGR 221	4
MAT 109	5	CHE 361	5
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
GSP 281	3	MAT 111	4
MIL 201 or option	2	MIL 202 or option	2
	17		18

BROADCASTING

See DRAMA and SPEECH

BUSINESS ADMINISTRATION

Preparatory curriculum for majors in Electronic Data Processing, Economics, General Business, Finance, Management, Marketing, or Office Administration, College of Business

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ACC 108 or 109	3
GSO 100	1	General education science or mathematics*; GSH 124 or 126	3
GSP 180	1	General education social science, GSS 246, or HIS 202	3
MIL 101 (men) or elective (women)	2	GSE 102	3
Suggested general education options:		GSP 181	1
General education science or mathematics* or GSH 124	3	MIL 102 (men) or elective (women)	2
Social science	3		
Suggested general elective:			
ACC 108 or OAD 101	3		
	16		15

Second Year

ECO 230	3	ECO 231	3
ENG 209 or 211; GSH 126 or 228	3	ENG 210 or 212; GSH 228 or 230	3
General education science or mathematics* or non-business elective	3-5	General education science or mathematics*	3
GSP 281 or elective**	3	GSP 281 or elective**	3
GSS 246 or 247; HIS 202 or 203***	3	GSS 247, HIS 203, or general education social science	3
MIL 201 or option	2	MIL 202 or option	2
	17-19		17

*Six hours of general education laboratory science must be completed while the student is in Central University College.

**GSP 281 must be completed while the student is in Central University College.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

BUSINESS EDUCATION

Preparatory curriculum for a major in Business Teacher Education, College of Business

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ACC 108 or 109	3
GSO 100	1	General education laboratory science*	3
GSP 180	1	General education social science, GSS 246 or HIS 202	3
MIL 101 (men) or elective (women)	2	GSE 102	3
Suggested general education options:		GSP 181	1
Social Science	3	MIL 102 (men) or elective (women)	2
Laboratory science	3	OAD 151, 152, or 253	2
Suggested general electives:			
ACC 108	3		
OAD 151 or 152	2		
	18		17

Second Year

ACC 109 or elective	3	ECO 230 or 231	3
ECO 230 or general education laboratory science*	3	EDF 202 or PSY 211	3
EDF 202 or PSY 211	3	GSP 281	3
GSS 246 or 247; HIS 202 or 203**	3	GSS 247, HIS 203** or general education social science	3
MIL 201 or option	2	MIL 202 or option	2
OAD 152, 253, 115, or 116	2-3	OAD 253, 115, 116, or 202	2-3
	16-17		16-17

*Six hours of laboratory science must be completed while the student is in Central University College.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

DISTRIBUTIVE EDUCATION

Preparatory curriculum for a major in Distributive Teacher Education, College of Business

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ACC 108 or 109	3
GSO 100	1	ECO 230 or 231	3
GSP 180	1	General education science or mathematics*	3
MIL 101 (men) or elective (women)	2	GSE 102	3
Suggested general education options:		GSP 181	1
ECO 230	3	MIL 102 (men) or elective (women)	2
General education science or mathematics*	3		
Suggested general elective:			
ACC 108	3		
	16		15

Second Year

ACC 109 or GSP 281**	3	EDF 202 or PSY 211	3
ECO 231 or general education humanities	3	ENG 210 or 212	3
EDF 202 or PSY 211	3	General education science or mathematics*	3
ENG 209 or 211	3	GSP 281** or general education humanities	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

*Six hours of general education laboratory science must be completed while the student is in Central University College.

**GSP 281 must be completed while the student is in Central University College.

CHEMISTRY

Preparatory curriculum for a major in Chemistry
(teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
CHE 111	4	CHE 112	5
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	MAT 111	4
MAT 109	5	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2		
	16		15

Second Year

CHE 213	4	GER 102, EDF 202, or PSY 211*	3
GER 101, EDF 202, or PSY 211*	3	GSP 281	3
MAT 112	3	MAT 213	4
MIL 201 or option	2	MIL 202 or option	2
PHY 201	5	PHY 202	5
	17		17

*Four semesters of German are required for the non-teaching major; EDF 202 and PSY 211 are required for the teaching major.

CHILD DEVELOPMENT

See HOME ECONOMICS

DIETETICS

See HOME ECONOMICS

DISTRIBUTIVE EDUCATION

See Business Education

DRAMA AND SPEECH

Preparatory curriculum for majors in Broadcasting, Speech, Speech and Drama, and Drama (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education laboratory science*	3
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2-3	GSS 246, HIS 202, or general education social science	3
Suggested general education options:		MIL 102 (men) or elective (women)	2-3
Social science	3	SPE or DRA elective*	3
Laboratory science	3		
Suggested general elective: SPE or DRA*	3		
	16-17		15-16

Second Year

EDF 202, PSY 211, or humanities elective**	3	EDF 202, PSY 211 or elective**	3
ENG 209 or 211	3	ENG 210 or 212	3
GSP 281	3	General education science or humanities elective	3
GSS 246 or 247; HIS 202 or 203	3	GSS 247, HIS 203, or general education social science (Area III B 2)	3
MIL 201 or option	2-3	MIL 202 or option	2-3
SPE or DRA elective*	3	Elective*	3
	17-18		17-18

*To be selected with approval of advisor.

**Students preparing for teaching must complete EDF 202 and PSY 211.

EARTH SCIENCE

See GEOLOGY

ECONOMICS

See Business Administration

ELECTRONIC DATA PROCESSING

See Business Administration

ELEMENTARY EDUCATION

Preparatory curriculum for a major in Elementary Education. Elementary Education majors who wish to also certify for teaching in kindergarten or in special education are urged to discuss these plans with their advisors early in the program of studies.

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities or geography requirement***	3
GSO 100	1	General education science**	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246, HIS 202, or general education social science	3
Social science	3	MIL 102 (men) or elective (women)	2
Science*	3		
Suggested general elective:			
General education humanities	3		
	16		15

Second Year

EDF 202 or PSY 211	3	EDF 202 or PSY 211	3
General education literature, GSH 228, or geography requirement***	3	General education literature or GSH 230	3
General education science*	3	General education science**	3
GSP 281	3	GSS 247, HIS 203****, or general education social science (Area III B 2)	3
GSS 246 or 247; HIS 202 or 203	3	MAT 201 or 203	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

*Students seeking kindergarten or special education certificates are urged to discuss plans with their advisors early in the program of studies.

**Six hours of general education laboratory science must be completed while the student is in Central University College. At least one course must be in biological science and at least one course must be in physical science.

***One course to be selected with approval of advisor from the following: GEO 101, 102, 345, or 346.

****GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

ENGLISH

Preparatory curriculum for a major in English
(teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language or elective	3
GSO 100	1	General education laboratory science*	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246, HIS 202, or other general education social science	3
Laboratory science	3-4	MIL 102 (men) or elective (women)	2
Social science	3		
Suggested general elective:			
Foreign language	3		
	16-17		15

Second Year

EDF 202, PSY 211 or elective**	3	EDF 202, PSY 211 or elective**	3
ENG 209 or 211	3	ENG 210 or 212	3
Foreign language or elective	3	Foreign language or elective	3
GSS 246 or 247; HIS 202 or 203***	3	GSP 281	3
MIL 201 or option	2	GSS 247, HIS 203***, or general education social science elective (Area III B 2)	3
SPE 100, general education laboratory science*, or elective	3	MIL 202 or option	2
	17		17

*Three hours of biological laboratory science and three hours of physical laboratory science must be completed while the student is in Central University College.

**Students preparing for teaching must complete PSY 211 and EDF 202.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

JOURNALISM

Preparatory curriculum for a major in Journalism (non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language** or other general education humanities	3
GSO 100	1	General education social science***	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSP 281	3
Social science	3	MIL 102 (men) or elective (women)	2
Science* or mathematics	3-5		
Suggested general elective:			
Foreign language**	3		
	16-18		15

Second Year

ENG 209 or 211	3	ENG 210 or 212	3
Foreign language** or elective	3	Foreign language** or elective	3
General education science* or mathematics	3-4	General education science* or mathematics	3-4
GSS 246 or 247; HIS 202 or 203***	3	GSS 247, HIS 203, or other general education social science (Area III B 2)***	3
JOU 200	3	JOU 201	3
MIL 201 or option	2	MIL 202 or option	2
	17-18		17-18

*Six semester hours of laboratory science must be completed while the student is in Central University College.

**Six to 12 semester hours of foreign language are required in Central University College, the amount of required credit depending upon the student's competency.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

FINANCE

See BUSINESS ADMINISTRATION

FOOD SERVICE ADMINISTRATION

See HOME ECONOMICS

FOREIGN LANGUAGE

Preparatory curriculum for a major in Foreign Language (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language	3
GSO 100	1	General education mathematics or science*	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2-3	GSP 181	1
Suggested general education options:		GSS 246, HIS 202**, or general education social science	3
Mathematics or science*	3	MIL 102 (men) or elective (women)	2-3
Social science elective	3		
Suggested general elective:			
Foreign language	3		
	16-17		15-16

Second Year

EDF 202, PSY 211***, or foreign language	3	EDF 202, PSY 211***, or foreign language	3
Foreign language	3	ENG 209 or 211	3
General education mathematics or science*	3	Foreign language	3
GSP 281	3	General education mathematics or science*	3
GSS 246 or 247; HIS 202 or 203*	3	GSS 247, HIS 203**, or general education social science (Area III B 2)	3
MIL 201 or option	2-3	MIL 202 or option	2-3
	17-18		17-18

*Three hours of biological laboratory science and three hours of physical laboratory science must be completed while the student is in Central University College.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

***EDF 202 and PSY 211 must be completed in Central University College by students seeking teaching certificates.

FORESTRY

See PRE-FORESTRY listed with BIOLOGY

GENERAL BUSINESS

See BUSINESS ADMINISTRATION

GEOGRAPHY

Preparatory curriculum for a major in Geography (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GEO 210* or humanities elective	3
GSO 100	1	GEO 216	3
GSP 180	1	GLY 108 or 210	3-4
MIL 101 (men) or elective (women)	2	GSE 102	3
Suggested general education options:		GSP 181	1
GEO 210	3	GSS 246 or HIS 202	3
Biological laboratory science	3	MIL 102 (men) or elective (women)	2
General elective	3		
	16		18-19

Second Year

EDF 202, PSY 211**, or elective	3	EDF 202, PSY 211**, or elective	3
General education literature or GSH 228	3	General education literature or GSH 230	3
General education laboratory science*** or MAT 107	3	General education social science	3
GSP 281	3	GEO 220	3
GSS 247 or HIS 203	3	MIL 202 or option	2
MIL 201 or option	2	Elective***	3
	17		17

*GEO 210 must be completed during the first two semesters.

**Students seeking teaching certificates must complete EDF 202 and PSY 211.

***Six hours of a general education laboratory science must be completed while the student is in Central University College.

REGIONAL PLANNING

Preparatory curriculum for Regional Planning (non-teaching), Department of Geography, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	General education biological laboratory science, GLY 108, or GLY 210*	3-4
MIL 101 (men) or elective (women)	2	General education humanities, GSS 246 or HIS 202	3
Suggested general education options:		INT 191	3
GLY 108 or 210	3-4	MIL 102 (men) or elective (women)	2
GEO 210	3		
Suggested general elective:			
General education humanities	3		
	16-17		15-16

Second Year

General education humanities or biological laboratory science*	3	ECO 230	3
GSP 281	3	General education humanities	3
GSS 246 or 247; HIS 202 or 203**	3	GSS 247, HIS 203**, or elective	3
MIL 201 or option	2	MIL 202 or option	2
PLA 220	3	PLA 221	3
POL 101	3	SOC 231	3
	17		17

*Six hours of general education laboratory science must be completed while the student is in Central University College; three hours of this must be biological laboratory science.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

GEOLOGY
EARTH SCIENCE

Preparatory curriculum for majors in Geology (non-teaching) and Earth Science (teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	CHE 111, BIO 141, or elective	3-4
GSO 100	1	GLY 210 or 211	3-4
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		MAT 109 or CHE 112	5
GSP 281*	3	MIL 102 (men) or elective (women)	2
BIO 141 or CHE 111	4		
Suggested general elective:			
GLY 210	4		
	18		17-19

Second Year

CHE 111, 112, or MAT 109	4-5	BIO 141, CHE 112 or 213, EDF 202, or PSY 211**	3-5
EDF 202, PSY 211**, or MAT 111	3-4	GEO 210, MAT 207, or elective	3
GLY 211 or 310	3-4	GSP 281* or elective	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
MIL 201 or option	2	MIL 202 or option	2
		Elective	0-4
	15-18		16-18

*GSP 281 must be completed while the student is in Central University College.

**EDF 202 and PSY 211 are required for students seeking teaching certificates.

HEALTH

(See Physical Education for preparatory curriculum
in the area of Health and Physical Education)

Preparatory curriculum for a major in Public Health, School of Health, Physical Education, Recreation, and Athletics, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	CHE 101, 111, 112, or BIO 141	4-5
GSO 100	1	General education humanities	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246, HIS 202, or general education social science	3
Social science	3	MIL 102 (men) or elective (women)	2
Humanities	3		
Suggested general elective:			
CHE 101 or 111	4		
	17		16-17

Second Year

BIO 141, 211, or CHE 112	4-5	BIO 211 or 221	3-4
ENG 211 or GSH 228	3	ENG 212 or GSH 230	3
GSP 281	3	GSS 247, HIS 203*, or general education social science elective (Area III B 2)	3
GSS 246 or 247; HIS 202 or 203	3	HEA 300	2
MIL 201 or option	2	HEA 315	2
		NFA 201	2
		MIL 202 or option	2
	15-16		17-18

*GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

Preparatory curriculum for a major in School Health, School of Health, Physical Education, Recreation, and Athletics, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities	3
GSO 100	1	General education laboratory science	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246, HIS 202, or general education social science	3
Laboratory science	3	HEA 202	2
Social science	3	MIL 102 (men) or elective (women)	2
Suggested general elective:			
General education humanities	3		
	16		17

Second Year

EDF 202 or PSY 211	3	BIO 301 and 378	4
ENG 211 or GSH 228	3	EDF 202 or PSY 211	3
General education science	3	ENG 212 or GSH 230	3
GSP 281	3	GSS 247, HIS 203*, or general education social science (Area III B 2)	3
GSS 246 or 247; HIS 202 or 203	3	HEA 300	2
MIL 201 or option	2	MIL 202 or option	2
	17		17

*GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

HISTORY

Preparatory curriculum for a major in History (teaching or non-teaching), or an area in History and Social Science, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language or general education science*	3
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSS 142 or 246**	3
Suggested general education options:		HIS 202	3
Science*	3	MIL 102 (men) or elective (women)	2
GSS 142	3		
Suggested general elective: Foreign language or social science	3		
	16		15

Second Year

EDF 202, PSY 211, or elective	3	EDF 202, PSY 211, or elective	3
Foreign language, social science elective, or GSP 281***	3	General education literature	3
General education science* or literature	3	General education science* or social science elective	3
GSS 246 or 247**	3	GSS 247** or 248	3
HIS 203	3	GSP 281*** or elective	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

*Six hours of laboratory science must be completed while the student is in Central University College.

**GSS 246 and 247 must be completed while the student is in Central University College.

***GCP 281 must be completed while the student is in Central University College.

HOME ECONOMICS

Preparatory curriculum for Home Economics Education, College of Applied Arts and Technology

First Year

First Semester	**Hours**	**Second Semester**	**Hours**
GSE 101	3	CHE 101 or 102	4-5
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
Suggested general education options:		GSP 281* or restricted elective**	0-3
CHE 101	4	HEC 102 or 132	3
GSP 281	3	NFA 121 or HEC 231	2-3
Suggested general electives:			
HEC 102	3		
NFA 121	3		
	18		13-18

Second Year

CHE 102 and/or restricted elective**	5-7	EDF 202 or PSY 211	3
EDF 202 or PSY 211	3	General education literature	3
GSS 246 or 247; HIS 202 or 203***	3	GSS 247***, HIS 203***, or restricted elective**	3
HEC 132 or 202	3	HEC 202* or restricted elective**	0-3
HEC 231 or NFA 201	2	NFA 201* or restricted elective**	2-3
		NFA 321 or BIO 301 and 379	4
	16-18		15-19

*Must be completed while the student is in Central University College.

**To be selected with approval of advisor to meet general education, major, or minor requirements.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

Preparatory curriculum for Child Development**** (with or without meeting guidelines for teaching kindergarten), College of Applied Arts and Technology

First Year

First Semester	**Hours**	**Second Semester**	**Hours**
GSE 101	3	ANT 201	3
GSO 100	1	CHE 101 or MAT 107	3-4
GSP 180	1	GSE 102	3
Suggested general education options:		GSP 181	1
CHE 101	4	GSP 281* or restricted elective**	3
GSP 281	3	HEC 132 or restricted elective**	3
Suggested general elective:		NFA 201	2
HEC 132	3		
	15		18-19

Second Year

EDF 202*** or restricted elective**	3-6	BIO 301 and 379	4
GSS 246 or 247; HIS 202 or 203	3	EDF 202 or restricted elective **	0-3
HEC 241	3	General education literature	3
MAT 107 or restricted elective**	3	GSS 247*, HIS 203*, or restricted elective**	3
PSY 211	3	HEC 341	3
		SOC 231	3
	15-18		16-19

*GSP 281 and either GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

**Selected with approval of advisor to meet general education, major, or minor requirements.

***Must be completed in Central University College by students preparing for kindergarten teaching.

****Male Students must meet Military Science requirements.

Preparatory curriculum for Dietetics (Administrative or Therapeutic) and Food Service Administration, College of Applied Arts and Technology

First Year

First Semester	**Hours**	**Second Semester**	**Hours**
GSE 101	3	CHE 101, 102, or other general education science	4-5
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSP 281* or ACC 108	3
Suggested general education options:		MIL 102 (men) or elective (women)	2
CHE 101	4	NFA 121	0-3
GSP 281	3	NFA 201	2
Suggested general elective:			
NFA 121	3		
	17		15-19

Second Year

ACC 108* or ECO 230	3	BIO 301 and 379	4
CHE 102, other general education science, or general education literature	3-5	GSS 247 or HIS 203	3
GSS 246 or HIS 202	3	MIL 202 or option	2
MIL 201 or option	2	Restricted electives**	9
NFA 341	4		
	15-17		18

*Must be completed while the student is in Central University College.

**To be selected with approval of advisor from ANT 110, ECO 230 or 231, HEC 202, SPE 100, or general education literature.

Preparatory curriculum for Textiles and Design with minors in Art, Journalism, Business Administration, or Chemistry, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	CHE 101 or 111; 102 or 112	4-5
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSP 281*, or restricted elective**	3
Suggested general education options:		HEC 102 or 202	3
CHE 101 or 111	4	MIL 102 (men) or elective (women)	2
GSP 281	3		
Suggested general elective:			
HEC 102	2		
	17		16-17

Second Year

CHE 102, 112, or restricted elective**	3-5	CHE 102, 112, and/or restricted elective**	5-11
GSS 246 or 247; HIS 202 or 203	3	General education literature	3
HEC 202 or 305	3	GSS 247*, HIS 203*, or restricted elective**	3
MIL 201 or option	2	MIL 202 or option	2
NFA 201	2		
Restricted elective**	3		
	16-18		13-19

*GSP 281 must be completed while the student is in Central University College; GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

**Selected with approval of advisor to meet general education, major, or minor requirements.

INDUSTRIAL EDUCATION

Preparatory curriculum for a Comprehensive Area in Industrial Education, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education laboratory science	3
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	IED 130	1
Suggested general education options:		IED 180 or 141	3
Humanities	3	IED 292 or 191	3
Science or mathematics	3	MIL 102 (men) or elective (women)	2
Suggested general electives:			
IED 141	3		
IED 191	3		
	19		16

Second Year

EDF 202 or PSY 211	3	EDF 202 or PSY 211	3
General education laboratory science* or GSP 281	3	ENG 209, 211, or GSP 281*	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
IED 242 or 292	3	IED 311 or 242	3
IED 281 or 180	3	IED 351 or 281	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

*Six hours of laboratory science must be completed while the student is in Central University College; GSP 281 must be completed in Central University College.

Preparatory curriculum for a Specialized Area in Industrial Education, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	IED 130	1
MIL 101 (men) or elective (women)	2	IED 141	3
Suggested general education options:		IED 180 or MAT 109	3-5
Humanities	3	IED 292 or 191	3
MAT 109	5	MIL 102 (men) or elective (women)	2
Suggested general electives:			
IED 191	3		
	18		16-18

Second Year

EDF 202 or PSY 211	3	EDF 202 or PSY 211	3
GSS 246 or HIS 202	3	ENG 209 or 211	3
IED 242 or 292	3	GSP 281	3
MIL 201 or option	2	GSS 247 or HIS 203	3
PHY 131	5	IED 281 or 180	3
		MIL 202 or option	2
	16		17

VOCATIONAL-INDUSTRIAL AND TECHNICAL TEACHER EDUCATION

Preparatory curriculum for a major in Vocational-Industrial and Technical Teacher Education, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education social science, GSS 246 or HIS 202	3
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	IED 160 or industrial education elective*	3
Suggested general education options:		MAT 109 or general education science	3-5
Biological laboratory science	3	MIL 102 (men) or elective (women)	2
Social science	3		
Suggested general electives:			
Industrial education elective*	3		
IED 160	3		
	19		15-17

Second Year

GSP 281	3	ENG 209 or 211	3
GSS 246 or 247; HIS 202 or 203	3	GSS 247, HIS 203** or general education social science (Area III B 2)	3
Industrial education elective*	3-6	IED 261, IED elective, or general education humanities	2-6
MIL 201 or option	2	MIL 202 or option	2
PHY 131 or other general education laboratory science	3-5	PHY 132 or other general education laboratory science	3-5
	16-17		15-17

*Technical courses in industrial education as approved by advisor (18 semester hours maximum may be allowed by proficiency examination; six semester hours may be allowed for supervised work experience). A graduate of this approved program shall have a minimum of 2,000 clock hours of planned and supervised work experience in the occupation in which he plans to teach, or a minimum of three years of approved work experience in the occupation in which he plans to teach.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

INDUSTRIAL TECHNOLOGY

Preparatory curriculum for a major in Industrial Technology, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	INT 105	1
MIL 101 (men) or elective (women)	2	INT 141, 201, and 292; or INT 141 and MAT 109; or INT 191, 281, and MAT 109	8-11
Suggested general education options:		MIL 102 (men) or elective (women)	2
Humanities	3		
Social science	3		
Suggested general elective:			
INT 191 and/or 281	3-6		
	16-19		16-19

Second Year

GSS 246 or HIS 202	3	GSP 281	3
INT 106	1	GSS 247 or HIS 203	3
INT 311	3	Industrial technology elective	3
INT 351	3	MIL 202 or option	2
INT 292 or MAT 109	3-5	PHY 131	5
MIL 201 or option	2		
	15-17		16

JOURNALISM

See ENGLISH

LAW ENFORCEMENT

Preparatory curriculum for a major in Law Enforcement,
College of Applied Arts and Technology

First Year

First Semester	**Hours**
GSE 101	3
GSO 100	1
GSP 180	1
MIL 101 (men) or elective (women)	2
Suggested general education options:	
Mathematics or science*	3
Social science	3
Suggested general electives:	
LEN 101	3
OAD 151** or elective	2
	18

Second Semester	**Hours**
General education mathematics or science*	3
GSE 102	3
GSP 181	1
GSS 246, HIS 202, or general education social science	3
LEN 101 or 102	3
MIL 102 (men) or elective (women)	2
OAD 151** or HEA 202	2
	17

Second Year

General education mathematics or science*	3
GSP 281	3
GSS 246 or 247; HIS 202 or 203	3
HEA 202 or general education literature	2-3
LEN 102 or 203	3
MIL 201 or option	2
	16-17

General education literature	3
General education mathematics or science*	3
GSS 247, HIS 203***, or general education social science (Area III B 2)	3
LEN 203 or 205	3
MIL 202 or option	2
Minor subject**** or POL 101	3
	17

*GSC 172 and one general education biological science course must be completed while the student is in Central University College.

**A student who is not proficient in typing will be required to enroll in OAD 151 to remove this deficiency.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

****Minors are recommended in the fields of business, psychology, sociology, or political science. The minor field should be selected in consultation with the head of the Department of Law Enforcement. The course comprising the minor field (18 semester hours) will be selected with the approval of the head of the Department of Law Enforcement and the department head in the minor field.

LIBRARY SCIENCE

Preparatory curriculum for a major in Library Science (teaching), College of Education

First Year

First Semester	**Hours**	**Second Semester**	**Hours**
GSE 101	3	Foreign language*, ART 200, MUS 271, or GSH 126	3
GSO 100	1	General education mathematics or science**	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 142, 144, 246, or HIS 202	3
Foreign language*, ART 200, or GSH 124	3	MIL 102 (men) or elective (women)	2
GSS 142	3		
Suggested general elective:			
General education mathematics or science**	3		
	16		15

Second Year

EDF 202 or PSY 211	3	EDF 202 or PSY 211	3
ENG 211, GSH 228, foreign language*, ART 200, or MUS 271	3	ENG 211 or 212, or GSH 230	3
General education mathematics or science**	3	General education mathematics or science**	3
GSP 281	3	GSS 247, 248, or HIS 203***	3
GSS 246 or 247; HIS 202 or 203	3	LIB 300	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

*Library Science majors are strongly urged to take a foreign language. Six hours of the same foreign language must be completed to meet the general education humanities requirement.

**Six hours of laboratory science must be completed while the student is in Central University College. Three hours of biological science and three hours of physical science are required for graduation.

***GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

MANAGEMENT

See BUSINESS ADMINISTRATION

MANUAL ARTS THERAPY

Preparatory curriculum for an area in Manual Arts Therapy (teaching), Department of Industrial Education, College of Applied Arts and Technology

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education laboratory science	3
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	IED 130	1
Suggested general education options:		IED 180 or 141	3
Humanities	3	IED 292 or 191	3
Biological science	3	MIL 102 (men) or elective (women)	2
Suggested general electives:			
IED 141	3		
IED 191	3		
	19		16

Second Year

EDF 202 or PSY 211	3	EDF 202 or PSY 211	3
GSP 281	3	ENG 209 or 211	3
GSS 246 or HIS 202	3	General education laboratory science	3
IED 242 or 292	3	GSS 247 or HIS 203	3
IED 281 or 180	3	IED 351 or 242	3
MIL 201 or option	2	MIL 202 or option	2
	17		17

MARKETING

See BUSINESS ADMINISTRATION

MATHEMATICS

Preparatory curriculum for a major in Mathematics (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
General education biological science	3	GSE 102	3
General education social science	3	GSP 181	1
GSE 101	3	GSP 281	3
GSO 100	1	GSS 246 or HIS 202	3
GSP 180	1	MAT 111 or 112	4
MAT 109* or 110* and 111	4-5	MIL 102 (men) or elective (women)	2-3
MIL 101 (men) or elective (women)	2-3		
	17-19		16-17

Second Year

General education literature, EDF 202, or PSY 211**	3	General education literature, EDF 202, or PSY 211**	3
GSS 247 or HIS 203	3	General education social science	3
MAT 112 or 213	4	MAT 213, 370, or 380**	3-4
MIL 201 or option	2-3	MIL 202 or option	2-3
PHY 201	5	PHY 202	5
	17-18		16-18

*MAT 109 and 110 may be waived. Placement in the beginning mathematics courses will be determined by the Mathematics Department.

**Students who wish to qualify for teaching certificates must complete EDF 202, PSY 211, and MAT 213 or 380.

MEDICAL SCIENCE

See Pre-Medical Science

MEDICAL TECHNOLOGY

Preparatory curriculum for a major in Medical Technology, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
BIO 141	4	BIO 211	4
CHE 111	4	CHE 112	5
General education social science elective (Area III B 1)	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	GSS 246, HIS 202, or general education social science elective (Area III B 2)	3
GSP 180	1	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2		
	18		18

Second Year

CHE 213	4	BIO 242	4
ENG 209 or 211	3	ENG 210 or 212	3
GSP 281	3	GSS 247, HIS 203*, or general education social science elective (Area III B 2)	3
GSS 246 or 247; HIS 202 or 203	3	MAT 207	3
MAT 107	3	MIL 202 or option	2
MIL 201 or option	2		
	18		15

*GSS 246 and 247 or HIS 202 and 203 must be completed while the student is enrolled in Central University College.

MUSIC

Preparatory curriculum for Bachelor of Music Education (teaching), Bachelor of Music with majors in Applied Music or Church Music, and Bachelor of Arts with a major in Music (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
General education social science elective	3	General education laboratory science	3
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2	MUS 182	4
MUS 181	4	Music applied electives*	3
Music applied electives*	3	Music ensemble	½
Music ensemble	½		
	17½		16½

Second Year

EDF 202, PSY 211**, GER 101, or elective	3	EDF 202, PSY 211**, GER 102, or elective	3
GSP 281	3	General education laboratory science	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
MIL 201 or option	2	MIL 202 or option	2
MUS 281	4	MUS 282	4
Music applied electives*	2	Music applied electives*	2
Music ensemble	½	Music ensemble	½
	17½		17½

*Music applied major, one or two hours, and MUS 130, 251, 110, 111, or 113, as prescribed in B.M.E., B.M., or B.A. programs.

**EDF 202 and PSY 211 are required for students seeking a teaching certificate.

OFFICE ADMINISTRATION

See BUSINESS ADMINISTRATION

PHILOSOPHY

Preparatory curriculum for a major in Philosophy (non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language or general education laboratory science*	3-4
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSS 142, 246, or HIS 202*	3
Suggested general education options*:		MIL 102 (men) or elective (women)	2
Laboratory science	3-4	PHI 110, 130, or 211	3
GSS 142	3		
Suggested general elective:			
PHI 110	3		
	16-17		15-16

Second Year

Foreign language* or elective	3	Foreign language* or elective	3
General education literature or other general education requirement	3-4	General education literature or other general education requirement	3-4
General education science* or other general education requirement	3-4	GSP 281* or elective	3
GSS 246 or 247; HIS 202 or 203*	3	GSS 247, 248, or HIS 203*	3
MIL 201 or option	2	MIL 202 or option	2
PHI 130 or 211	3	PHI 130, 211, or 300	3
	17-19		17-18

*The following requirements must be completed by students while they are enrolled in Central University College: GSS 246 and 247 or HIS 202 and 203; GSP 281; six hours of laboratory science; and six hours of foreign language, preferably French or German.

PHYSICAL EDUCATION

Preparatory curriculum for men majoring in Physical Education, or an area in Health, Physical Education and Recreation (teaching or non-teaching), School of Health, Physical Education, Recreation, and Athletics, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ART 200, MUS 271, or GSH 126	3
GSO 100	1	General education social science	3
GSP 180	1	GSE 102	3
MIL 101	2	GSP 181	1
Suggested general education options:		GSP 281	3
ART 200, MUS 271, or GSH 124	3	HEA 202* or PHE 125	2
GSC 261, BIO 162, or laboratory physical science	3	MIL 102	2
Suggested general electives:			
General education social science	3		
PHE 125	2		
	18		17

Second Year

EDF 202 or PSY 211**, or elective	3	BIO 162, 301, GSC 261***, or laboratory physical science	3
ENG 211 or GSH 228	3	EDF 202, PSY 211**, or elective	3
GSC 261, BIO 162***, or laboratory physical science	3	ENG 212 or GSH 230	3
GSS 246 or 247; HIS 202 or 203	3	GSS 247, HIS 203****, or other general education social science (Area III B 2)	3
HEA 202 (if needed)*	0-2	MIL 202 or option	2
MIL 201 or option	2	PHE 215 or 216	2
PHE 215 or 216	2		
	16-18		16

*Students preparing for the area major must complete HEA 202.

**EDF 202 and PSY 211 are required for a teaching certificate.

***GSC 261 or BIO 162 is a prerequisite to BIO 301.

****GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

Preparatory curriculum for women majoring in Physical Education, or an area in Health, Physical Education, and Recreation (teaching or non-teaching), School of Health, Physical Education, and Recreation, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities	3
GSO 100	1	General education social science	3
GSP 180	1	GSC 261, BIO 162, or general education physical science**	3
Suggested general education options:		GSE 102	3
GSC 261, BIO 162, or physical science	3	GSP 181	1
Social science	3	PHE 125 or optional approved elective*	0-2
Suggested general electives:		REC 201, general education requirement, or approved elective*	3
Humanities	3		
HEA 202 or approved elective*	2		
PHE 125	2		
	18		16-18

Second Year

EDF 202, PSY 211***, or elective	3	BIO 301	3
ENG 209, 211, or GSH 228	3	EDF 202, PSY 211***, or elective	3
General education mathematics or science**	3	ENG 210, 212, or GSH 230	3
GSS 246 or HIS 202	3	GSP 281 or approved elective*	3
HEA 202 or optional approved elective*	0-2	GSS 247 or HIS 203	3
PHE 207	2	PHE 208	2
PHE 300	2	PHE 241	1
	16-18		18

*Students preparing to major in physical education should choose electives from their other major or minor field with approval of advisor. GSP 281 must be completed while the student is in Central University College.

**GSC 261 or BIO 162 and three hours of general education physical science must be completed before the second semester of the sophomore year. Six hours of laboratory science must be completed while the student is in Central University College.

***EDF 202 and PSY 211 are required for students seeking teaching certificates.

PHYSICS

Preparatory curriculum for a major in Physics (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	GSS 246 or HIS 202	3
GSP 281	3	MAT 111	4
MAT 109	5	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2	PHY 201	5
PHY 100	1		
PHY 107*	1		
	17		18

Second Year

EDF 202, PSY 211**, or CHE 111	3-4	CHE 111 or CHE 112	4-5
GSS 247 or HIS 203	3	EDF 202, PSY 211**, or general education social science	3
MAT 112	4	MAT 213	4
MIL 201 or option	2	MIL 202 or option	2
PHY 202	5	PHY 307	4
	17-18		17-18

*May be waived with consent of advisor.

**Students preparing for teaching must complete EDF 202 and PSY 211.

PLANNING

See "Regional Planning" under Geography

POLITICAL SCIENCE

Preparatory curriculum for a major in Political Science (teaching or non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	Foreign language or elective	3
GSO 100	1	General education science*	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		MIL 102 (men) or elective (women)	2
Laboratory science	3	POL 100 or 101	3
Social science	3		
Suggested general elective:			
Foreign language	3		
	16		15

Second Year

EDF 202, PSY 211, or general education mathematics or science*	3	EDF 202, PSY 211, or general education mathematics or science*	3
General education literature	3	General education literature	3
GSP 281	3	GSS 247 or HIS 203	3
GSS 246 or HIS 202	3	Foreign language or approved elective*	3
MIL 201 or option	2	MIL 202 or option	2
POL 101, foreign language, or approved elective	3	Political science elective	3
	17		17

*Six hours of approved laboratory science must be completed while the student is in Central University College; EDF 202 and PSY 211 must be completed in Central University College by students seeking teaching certificates.

PRE-FORESTRY

See BIOLOGY

PRE-MEDICAL SCIENCES

Preparatory curriculum for a major in Pre-Medical Sciences, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
BIO 141	4	BIO 211	4
CHE 111	4	CHE 112	5
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	GSS 247 or HIS 203	3
GSS 246 or HIS 202	3	MIL 102 (men) or elective (women)	2
MIL 101 (men) or elective (women)	2		
	18		18

Second Year

BIO 242	4	BIO 221	4
CHE 213	4	GSP 281	3
MAT 109	5	MAT 111	4
MIL 201 or option	2	MIL 202 or option	2
		SOC 231	3
	15		16

PRE-VETERINARY

See BIOLOGY

PSYCHOLOGY

Preparatory curriculum for a major in Psychology (non-teaching), College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	BIO 141, 162, MAT 107* or PHY 176	3-4
GSO 100	1	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101 (men) or elective (women)	2	GSP 281, foreign language, or elective*	3
Suggested general education options:		GSS 246 or HIS 202	3
ANT 110 or GSS 142	3	MIL 102 (men) or elective (women)	2
BIO 141 or 162	3-4		
Suggested general elective:			
GSP 281 or foreign language	3		
	16-17		15-16

Second Year

BIO 142, 162, MAT 107*, or PHY 176	3-4	BIO 301	3
ENG 211	3	ENG 212	3
GSP 281, foreign language, or elective*	3	GSP 281, foreign language, or elective*	3
GSS 247 or HIS 203	3	GSS 248, ANT 202, or SOC 231**	3
MIL 201 or option	2	MIL 202 or option	2
PSY 211	3	PSY 213	3
	17-18		17

*GSP 281, six hours of one foreign language, MAT 107, and BIO 141 or 162 must be completed while the student is in Central University College. This may require use of listed optional elective.

**GSS 248 must be completed if a general education social science course from Area III B 1 was chosen in the initial semester. ANT 202 or SOC 231 must be completed if Anthropology 110 was completed in the initial semester.

PUBLIC HEALTH

See HEALTH

RECREATION

Preparatory curriculum for a major in Recreation Administration (non-teaching), School of Health, Physical Education, Recreation, and Athletics, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ART 200, MUS 271, GSH 126, or GSP 281*	3
GSO 100	1	GSC 261 or 262; GLY 108 or 210	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 142 or 144	3
ART 200, MUS 271, or GSH 124	3	MIL 102 (men) or elective (women)	2
GSP 281	3	REC 163	1
Suggested general electives:			
REC 100 or HEA 202	2		
	15		16

Second Year

ENG 211 or GSH 228	3	ENG 212 or GSH 230	3
GSC 261 or 262; GLY 108 or 210	3	GSC 261 or 262; GLY 108 or 210	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
MIL 201 or option	2	MIL 202 or option	2
POL 101	3	REC 102 or 201	2-3
REC 100, PHE 215 (men), or PHE 207 (women)	2	PHE 215 or 216 (men), or PHE 207 or 208 (women)	2
REC 263	1		
	17		15-16

*GSP 281 must be completed while the student is in Central University College.

REGIONAL PLANNING
See GEOGRAPHY

REHABILITATION EDUCATION
See SPECIAL EDUCATION

SCHOOL HEALTH
See HEALTH

SOCIOLOGY AND SOCIAL WORK

Preparatory curriculum for majors in Sociology (teaching or non-teaching) or Social Work, College of Arts and Sciences

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ANT 110 or elective	3
GSO 100	1	General education humanities	3
GSP 180	1	General education mathematics or science*	3
MIL 101 (men) or elective (women)	2	GSE 102	3
Suggested general education options:		GSP 181	1
Elective	3	MIL 102 (men) or elective (women)	2
Mathematics or science*	3		
Suggested general elective:			
General education humanities	3		
	16		15

Second Year

EDF 202, PSY 211, SWK 210 or elective**	3	EDF 202, PSY 211, SWK 210 or elective**	3
ENG 209 or 211	3	ENG 210 or 212	3
General education mathematics or science*	3	GSP 281	3
GSS 246 or HIS 202	3	GSS 247 or HIS 203	3
MIL 201 or option	2	MIL 202 or option	2
SOC 231	3	SOC 232	3
	17		17

*Six hours of general education laboratory science must be completed by students while in Central University College.

**EDF 202 and PSY 211 are required for teaching certificates; SWK 210 and PSY 211 are required for the major in Social Work.

SPECIAL EDUCATION
(See also ELEMENTARY EDUCATION)

REHABILITATION EDUCATION

Preparatory curriculum for a major in Rehabilitation Education, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities	3
GSO 100	1	General education laboratory science*	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSS 246 or HIS 202	3
GSC 261 or BIO 162	3	MIL 102 (men) or elective (women)	2
Humanities	3		
Suggested general elective:			
GSP 281	3		
	16		15

Second Year

General education literature or GSH sequence	3	General education literature or GSH sequence	3
GSS 247 or HIS 203	3	General education laboratory science	3
BIO 301	3	GSP 281** or elective	3
MIL 201 or option	2	MIL 202 or option	2
PSY 211	3	RHB 300	3
SOC 231	3	SOC 335	3
	17		17

*Three hours of biological science must be completed during the first two semesters.

**GSP 281 must be completed while the student is in Central University College.

SPEECH PATHOLOGY AND AUDIOLOGY

Preparatory curriculum for a major in Speech Pathology and Audiology (teaching or non-teaching), Department of Special Education and Rehabilitation, College of Education

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities*, or physical science*	3
GSO 100	1	General education mathematics	3
GSP 180	1	GSE 102	3
MIL 101 (men) or elective (women)	2	GSP 181	1
Suggested general education options:		GSP 281*, physical science*, or elective	3
GSS 142*	3	GSS 246, HIS 202, or other general education social science*	3
Physical science*	3	MIL 102 (men) or elective (women)	2
Suggested general elective:			
SPE 100	3		
	16		18

Second Year

BIO 301	3	General education literature or GSH sequence	3
BIO 378	1	GSS 247, HIS 203**, or other general education social science (Area III B 2)	3
General education literature, GSH sequence, or SPE 100	3	MIL 202 or option	2
GSS 246 or 247; HIS 202 or 203	3	PSY 213 or EDF 202***	3
MIL 201 or option	2	PSY 312	3
PSY 211	3	SED 270	3
SED 275	3		
	18		17

*The following courses must be completed during the first two semesters: GSS 142, GSP 281, 3 semester hours of general education humanities, and 3 semester hours of laboratory science.

**GSS 246 and 247 or HIS 202 and 203 must be completed while the student is in Central University College.

***EDF 202 is required for the teaching program.

SPEECH

See DRAMA and SPEECH

SPEECH PATHOLOGY AND AUDIOLOGY

See SPECIAL EDUCATION

TEXTILES AND DESIGN

See HOME ECONOMICS

UNDECIDED

Preparatory curriculum for students who have not yet decided upon a major

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	General education humanities	3
GSO 100	1	General education mathematics or science*	3-4
GSP 180	1	General education social science	3
MIL 101 (men) or elective (women)	2	GSE 102	3
General education option	6	GSP 181	1
General elective	3-6	MIL 102 (men) or elective (women)	2
		Elective	0-3
	16-19		15-18

Second Year

ENG 209, 211, or GSH 228	3
General education mathematics or science*	3-4
GSP 281	3
GSS 246 or 247; HIS 202 or 203	3
MIL 201 or option	2
Elective	0-3
	14-18

Students must select a major before the fourth semester.

*Six hours of laboratory science must be completed in Central University College.

VETERINARY MEDICINE

See PRE-VETERINARY MEDICINE
listed with Biology

VOCATIONAL-INDUSTRIAL AND TECHNICAL TEACHER EDUCATION

See INDUSTRIAL EDUCATION

WILDLIFE

See BIOLOGY

College of Applied Arts and Technology

Agriculture . 114
Home Economics . 123
Industrial Education . 133
Industrial Technology . 145
The Kentucky School of Crafts . 158
Law Enforcement . 159
Nursing . 165
Traffic Safety Institute . 167
Kentucky Law Enforcement Council

COLLEGE OF APPLIED ARTS AND TECHNOLOGY

William E. Sexton, Dean

Jack A. Luy, Associate Dean

The College of Applied Arts and Technology is organized to provide programs of instruction, public service, and research as these relate to the broad field of technical education. The College offers undergraduate programs to prepare teachers of technical subjects, and, in cooperation with the Graduate School and the College of Education, a program of specialization in industrial education and home economics education leading to the Master of Arts in Education degree. In addition, the College, in cooperation with the Graduate School, offers programs leading to the Master of Science degree in industrial education, the Master of Science degree in industrial technology, the Specialist in Technology degree, and the Master of Science degree in criminal justice.

The College administers a variety of two- and four-year programs designed to prepare individuals for technical occupations and professions. Students enrolled in or completing Associate of Arts (two-year) degree programs may transfer to a baccalaureate program within the same department (exceptions are nursing and crafts) with little, if any, loss of credits.

The College of Applied Arts and Technology is composed of eight departments: Agriculture, Home Economics, Industrial Education, Industrial Technology, Nursing, Law Enforcement, The Kentucky School of Crafts, and The Traffic Safety Institute. A ninth unit, The Kentucky Law Enforcement Council, now an independent agency of state government, was established through a grant to the College of Applied Arts and Technology, Eastern Kentucky University, in 1966. The Executive Director of the Council works closely with the Dean of the College in the utilization of services and facilities at the University.

The Department of Agriculture administers two-year programs designed to prepare technicians for agriculture-related occupations. The Associate of Arts Degree is awarded to students who successfully complete the prescribed programs in Agricultural Mechanization, Dairy Science and Technology, or Horticulture. In addition, a baccalaureate program with a first major in Agriculture and a minor in Business is offered. The department also administers certain pre-professional and transfer curricula for students who plan to complete baccalaureate programs at other institutions.

The Department of Home Economics administers baccalaureate programs to prepare home economics teachers, child development, food service management, and textile and design specialists. In addition, students may specialize in administrative or therapeutic dietetics. Associate degree programs are offered in child care, food service technology, and homemaking supervision.

The Department of Industrial Education offers programs to prepare teachers in industrial arts and vocational technical education. In addition, the department offers a program of study for the preparation of manual arts therapists. These are baccalaureate level programs.

The Department of Industrial Technology administers two and four-year programs for the preparation of technicians for industrial employment. The Associate of Arts degree is awarded to those who successfully complete the two-year programs, (applied electronics technology, broadcast engineering technology, drafting technology, drafting and design technology, electronics technology, instructional media technology, and printing technology) and the Bachelor of Science Degree is awarded those completing the four-year programs.

The Department of Nursing offers a two-year, Associate of Arts, Registered Nurse program. Students who successfully complete the program of study are eligible to write the State Board Examination for Registered Nurses.

The School of Law Enforcement administers a baccalaureate program that provides for a major in law enforcement with a minor usually selected from the fields of business, political science, psychology, or sociology. In addition, four Associate of Arts programs (general, corrections, juvenile, and industrial security) are offered.

The Kentucky School of Crafts offers on-campus and extension instruction in vocational crafts. An Associate of Arts degree program is available with an emphasis in woodcraft.

The Traffic Safety Institute was established in 1966 to provide instruction, public service, and research related to the broad area of traffic safety.

Admission to the College of Applied Arts and Technology

Students enrolled in baccalaureate programs should apply for admission to the College during the semester in which Central University College requirements are expected to be met which is normally the last semester of the sophomore year. Students should apply for a planned curriculum, at the Office of the Dean, not later than the first semester of the junior year.

A number of associate degree programs are administered by the College of Applied Arts and Technology. Specific program requirements are outlined in this section of the catalog. Students pursuing two-year programs in the College of Applied Arts and Technology are enrolled in Central University College for advising and record keeping only. Their other academic affairs are administered by the Dean of the College of Applied Arts and Technology. Students should apply for a planned curriculum at the Office of the Dean, College of Applied Arts and Technology, at the beginning of the second semester of the freshman year.

Degree Requirements

General university requirements, described elsewhere in the catalog, as well as specific course requirements set forth in the descriptions of curricula, must be met by students completing baccalaureate programs administered in the College of Applied Arts and Technology. All baccalaureate programs in the College of Applied Arts and Technology must have an area of concentration, or two majors, or one major and two minors, or one major and one minor.

AGRICULTURE (AGR)

Householder, W., Chairman; Barkley, Devore, Hayes, Stocker, Whitaker

Eastern Kentucky University offers students of Agriculture three types of programs: (1) two-year technical training curriculums leading to an Associate of Arts Degree; (2) a four-year major in Agriculture with a minor in Business leading to a Bachelor of Science Degree; and (3) a minor in Agriculture. Graduates of these programs are in an unprecedented demand because the rapidly changing labor structure in agriculture throughout Kentucky and the United States is placing increasing value on technically trained personnel.

The technical student of Agriculture, regardless if he is a two or four-year student, must qualify himself for employment by preparing in three major areas:

1. The technical content of a selected area in agriculture.
2. The basic principles of agriculture in general.
3. Personal improvement through the intellectual pursuit of general education and business courses.

MAJOR IN AGRICULTURE WITH A MINOR IN BUSINESS

Curriculum for a Bachelor of Science Degree with a minor in Business. The first two years of this curriculum may be found in the Central University College section of the catalog.

Third Year

First Semester	Hours	Second Semester	Hours
AGR 380 series	5	AGR 312*	3
AGR 327, 328	3	AGR 310	4
ENG 209, 211	3	ENG 210, 212	3
ECO 230	3	ECO 231	3
GLY 108, 302	3	Electives	3
	17		16

Fourth Year

First Semester	Hours	Second Semester	Hours
AGR 340*	3	AGR 440*	3
AGR 410	1	ART 392**	3
ART 390**	3	OAD 301*	3
GBU 300	3	AGR 411	1
Electives	6	Electives	5
	16		15

*Substitutions permitted.

**Other Humanities may substitute.

MINOR IN AGRICULTURE

A minor consists of 18 hours of Agriculture arranged between the department chairman and the student seeking the minor. The objective is to meet the student's need for taking a minor in Agriculture. However, six or more hours shall be upper division courses.

ASSOCIATE OF ARTS DEGREE CURRICULA

AGRICULTURAL MECHANIZATION

A student receiving an Associate of Arts Degree in agricultural mechanization will have had a background of training in the areas of communications, business, and agriculture, in addition to technical training in agricultural mechanization. He will be qualified to seek employment in agricultural businesses in the areas of sales, parts, assembly, and repairs of agricultural equipment.

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
AGR 125	4	Gen. Ed. Electives**	3
AGR 213	4	AGR 272	5
AGR 263	1	INT 201*	3
GSE 101	3	GSE 102	3
GSP 180	1	GSP 181	1
MIL 101	2	MIL 102	2
GSO 100	1		
	16		17

Second Year

First Semester	Hours	Second Semester	Hours
AGR 130*	4	AGR 392	5
AGR 382	5	AGR 260	1
INT 191	3	ACC 124*	3
INT 180*	3	OAD 101*	3
MIL 201	2	Gen. Ed. Electives**	3
		MIL 202	2
	17		17

*Substitutions possible.
**Approval of advisor.

DAIRY SCIENCE AND TECHNOLOGY

The primary function of this curriculum is to give the student a deep insight into the technical management of dairy cattle herds. His training will qualify him to work with dairy herds or with related agricultural industries in the areas of sales and service.

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSO 100	1	ACC 124	3
AGR 125	4	AGR 270	5
AGR 130	4	GSE 102	3
AGR 263	1	INT 201*	3
GSE 101	3	MIL 102	2
GSP 180	1		
MIL 101	2		
	16		16

Second Year

First Semester	Hours	Second Semester	Hours
AGR 215*	4	AGR 260	1
AGR 380	5	AGR 310*	4
Gen. Ed. Math. or Sci.**	3	OAD 101*	3
AGR 213	4	AGR 390	5
MIL 201	2	Gen. Ed. Elective**	3
		MIL 202	2
	18		18

*Substitutions possible.
**Approval of advisor.

ORNAMENTAL HORTICULTURE

This curriculum trains the student in plant propagation, nursery and greenhouse operation and production, principles of landscape design, and maintenance of landscapes. He will qualify as a technical worker in nursery and greenhouse businesses, recreational organizations, golf courses, state highway and parks departments, and other institutions and businesses involved with ornamental plantings. He might also organize a private service.

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
AGR 131	4	GSC 172*	3
AGR 263	1	AGR 271	5
INT 201*	3	GSE 102	3
GSE 101	3	GSP 181	1
GSP 180	1	OAD 101*	3
MIL 101	2	MIL 102	2
GSO 100	1		
	15		17

Second Year

First Semester	Hours	Second Semester	Hours
AGR 213	3	AGR 260	1
AGR 391	5	AGR 381	5
AGR 215	4	AGR 362	1-3
MIL 201	2	ACC 124	3
INT 191*	3	MIL 202	2
		Gen. Ed. Electives**	3
	17		15-17

*Substitutions possible.
**Approval of advisor.

TURF MANAGEMENT OPTION
IN
ORNAMENTAL HORTICULTURE

This option is designed to prepare students for specialized technical work in positions such as a golf superintendent, park manager, sod producer, institutional and grounds supervisor, highway landscaper, and memorial grounds superintendent. He would also be trained for positions in turf-related industries where a knowledge of turf production is required.

Curriculum for the Turf-Grass Management Option

First Year

First Semester	Hours	Second Semester	Hours
AGR 131	4	AGR 213	4
AGR 351	4	AGR 215	4
AGR 263	1	AGR 271	5
GSE 101	3	AGR 362 Series	3
MIL 101	2		
GSO 100	1		
SPE 100	3		
	18		16

Summer Term

AGR 371	2-4

Second Year

First Semester	Hours	Second Semester	Hours
ACC 124	3	CHE 101	4
AGR 313	4	AGR 361	5
GSE 102	3	MIL Substitute	4
MIL 102	2	OAD 101	3
INT 201	3		
	15		16

PRE-VETERINARY MEDICINE

A limited number of college students who are residents of Kentucky and who have completed the required pre-veterinary medicine program are selected each year to enter the professional training program in veterinary medicine offered at Auburn University, Ohio State University, or at Tuskeegee Institute.

The students selected are exempt from the out-of-state tuition charge that would normally apply to a Kentucky resident. The students enter the four-year program of the transfer institution at the beginning of the fall term each year and are approved for succeeding years so long as normal progress is made toward the degree in Veterinary Medicine.

This training program is made available to Kentucky residents by an appropriation of the General Assembly to the Kentucky Council on Public High Education which administers the program in cooperation with Southern Regional Education Board and the three above named institutions.

A student who completes the program prescribed below and wishes to complete a baccaulaureate degree at Eastern Kentucky University should consult with the Dean of the College of Arts and Sciences concerning transfer to the program described in the College of Arts and Sciences section of this catalogue.

Core requirements to be completed by all Pre-Vet students:

	Hours		Hours
AGR 221	4	MAT 109	5
BIO 141, 211, 315	12	MIL 101, 102, 201 or option, 202 or option	8
CHE 111, 112, 213, 361	18	PHY 131, 132	10
GSE 101, 102	6	6 hrs. Humanities electives	6
GSO 100	1	3 hrs. Social Sci. electives	3
GSP 180, 181	2		
GSS 246, 247	6		
			81

Students planning to transfer to Auburn University must complete the following in addition to the core requirements:

	Hours		
CHE 362	4	NUR 220	3
GSP 281	3	POL 101 or 300	3
MAT 111	4		
			17

Students planning to transfer to the Ohio State University must complete the following in addition to the core requirements:

	Hours
AGR 125	4

Students planning to transfer to Tuskegee Institute must complete the following in addition to the core requirements:

	Hours		Hours
BIO 555	3	MAT 111	4
CHE 362	4	NUR 220	3
GSP 281	3	POL 101	3
			20

PRE-FORESTRY CURRICULUM

A student who wishes to prepare for a career as a professional forester may complete the equivalent of two years of coursework at Eastern Kentucky University and complete the baccalaureate degree program in approximately two years and one summer term at the University of Kentucky.

Students beginning a forestry curriculum are advised that the following courses should be completed before transferring to the University of Kentucky or to other schools offering degree programs in forestry.

Core requirements to be completed by all Pre-Forestry students:

	Hours		Hours
AGR 125, 130, 215	12	GSO 100	1
ECO 230, 231 or GEO 420	6	JOU 201	3
GSE 101 and 102	6	MIL 101, 102, 201 or option 202 or option	8
		SPE 100	3
			39

Students planning to transfer to the Forest Technology curriculum must complete the following in addition to the core requirements:

	Hours		Hours
BIO 131, 141 or		GSC 176	3
GSC 261, 262	6-8	HIS 202, 203	6
CHE 101, or 111, 102 or 112	9	MAT 109	5
			30-32

Students planning to transfer to the Forest Science curriculum must complete the following in addition to the core requirements:

	Hours		Hours
BIO 131, 141	8	MAT 109, 111	9
CHE 111, 112	9	Humanities or History electives	6
			32

AGRICULTURE (AGR)

AGR 125. (Formerly AGR 25.) Principles of Animal Science. (Formerly Farm Livestock Production.) **Four hours.** I.

Management and production practices of livestock enterprises; types, market classes and grades of beef cattle, sheep, and swine, and the breeds and products of dairy cattle.

AGR 130. (Formerly Introduction to Agronomy.) Principles of Agronomy. **Four hours.** I.

Principles of plant growth, reproduction, crop-soil relationships. Provides foundation of information for further study in field crop production and soil management.

AGR 131. (Formerly AGR 12.) Principles of Plant Propagation. (Formerly General Horticulture. **Four hours.** I.

Principles and techniques of plant reproduction, including soil-water-temperature-plant relationship, methods of propagation and growth habit, adaptations and uses.

AGR 201. Directed Work Experience. **One to four hours.** A.

A minimum of three hours per week of work on the college farm or an approved farm. Two months of full-time employment in an approved agri-business may be substituted for the work requirement. Students will meet one hour each for discussion and review of current publications.

AGR 213. Principles of Agricultural Mechanics. **Four hours.** I, II.

Principles of operation, maintenance and repair of gasoline engines and electrical motors; basic electrical circuits and electrical controls for agricultural mechanization systems and power requirements for agricultural structures; students receive theoretical and practical experience.

AGR 215. (Formerly AGR 30 and 315.) Principles of Soils. (Formerly called Soils.) **Four hours.** II.

Soil origin, classification, and properties; soil conservation; soil micro-organisms; organic matter; soil water; soil minerals; lime, commercial fertilizers; soil erosion; soil management. Students receive field experience.

AGR 221. (Formerly AGR 31 and 321.) Principles of Animal Nutrition. **Four hours.** I.

Digestion, absorption, assimilation, and utilization of nutrients by domestic animals; principle feeds and nutritive ratios; formulating livestock rations.

AGR 225. Livestock Judging. **Three hours.** A.

An evaluation of purebred and commercial dairy cattle, beef cattle, sheep, and swine; practice in written and oral reasons.

AGR 243. (Formerly SOC 114.) Agricultural Sociology. **Three hours.** I.
Social organization of individuals and groups of individuals involved in the pursuit of rural or non-urban life. Historical and present trends in agriculture; processes of technological development and how rural people adopt change.

AGR 260. Job Placement. **One hour.** II.
Required of all two year students in their fourth semester. Job placement orientation; techniques of being interviewed; preparing bio-data sheet; writing letters of inquiry and investigating job potentials.

AGR 263. Seminar in Technical Agriculture. **One hour.** I, II.
For two and four year students who want to study problems in technical agriculture in depth.

AGR 270. (Formerly AGR 223.) Farm Dairy Production. **Five hours.** II.
The dairy cow and her requirements in meeting her potential milk production; principles of milk production; basic practices of feeding, sanitation, housing, dairy cow selection, and production records.

AGR 271. Nursery and Plant Propagation Techniques. **Five hours.** II.
Cultural practices of propagating and growing evergreen, deciduous trees, shrubs, and hardy perennials to transplanting size, using structures and facilities not including the greenhouse. Students spend considerable time in the nursery.

AGR 272. Principles of Agricultural Machinery. **Five hours.** II.
Selection, operation, and maintenance of agricultural machinery used in the production and processing of agricultural products. Student experiences assembling different types of new farm machinery and reconditioning old machinery.

AGR 310. (Formerly AGR 32 and 345.) Principles of Farm Management. **Four hours.** II.
Organization and management of farms; cost of production; profits; types of farming; soil management; cropping systems and livestock enterprises.

AGR 312. Advanced Crops: Forage Crops. **Three hours.** II.
Prerequisite: AGR 130.
Cultural practices and principles of forage crops, especially grasses and legumes suited to Kentucky farms.

AGR 313. Methods of Using Agricultural Chemicals. **Four hours.** I.
Prerequisite: GSC 170 or equivalent.
The chemicals and physical properties of agricultural chemicals, their uses and effects on plants and their toxicity to man and animals. The student experiences work in formulations, calibration of equipment, and methods of application.

AGR 314. Nature of Insects, Parasites, and Diseases. **Four hours.** II.
Insects, parasites, and diseases as they relate to agricultural production, processing, and distribution; life cycles; damages to agricultural products; methods of control and extermination.

AGR 327. (Formerly AGR 44 and 227.) Beef Production. **Three hours.** I.
Prerequisite: AGR 125.
History, importance, and trends associated with the beef cattle industry; systems of selection, breeding, feeding, and management of beef cattle.

AGR 328. (Formerly AGR 26 and 228.) Pork Production. **Three hours.** A.
Prerequisite: AGR 125.
Types and breeds of swine; selection; breeding; feeding; disease control.

AGR 340. (Formerly AGR 240.) Conservation of Agricultural Resources. **Three hours.** I.
Conservation of soils and their fertility; erosion and control; soil conservation methods for individual farms; water supply and distribution; problems of water and air pollution; problems resulting from the population explosion.

AGR 344. Production of Economic Crops in Kentucky. Three hours. A.
Production of field and forage crops, identification, economic importance, production and harvesting techniques. Trial plots will be grown of all crops important to Kentucky.

AGR 351. Turfgrass Ecology and Morphology. Four hours. I.
Interrelationships of environmental factors and management practices as they affect growth and survival of turf type grasses.

AGR 361. Turf Production and Management. Five hours. II.
Physiological and edaphic factors affecting growth of adapted turfgrasses. Golf course and athletic field construction, turf establishment, irrigation, soil drainage, fertilization, disease, insect and weed problems, relating to turf.

AGR 362. (Formerly AGR 262.) Topics in Landscape Gardening. One-six hours. A
Students may enroll up to six times for a total of six credits. 362A Home Landscape; 362B Selection and Use of Ornamental Plants; 362C Landscape Maintenance; 362D Disease and Insect Control; 362E Floral Design; 362F Lawn Establishment and Maintenance; 362A or equivalent prior to enrolling specialized sections.

AGR 362G. Problems of Golf Course Operation. One hour.
Problems of the golf superintendent such as budget preparations and presentations, labor, supplies, work schedules, and tournament preparations will be emphasized.

AGR 371. Internship in Turf Management. Two or four hours.
Supervised practical experiences in turf management practices; arranged on approved University facilities or commercial establishments; credit varies with hours of employment; half-time, two hours; full-time, four hours.

AGR 380. (Formerly AGR 280.) Technical Management of Dairy Cattle. Five Hours. I.
A continuation of AGR 270 with greater emphasis on herd management, feeding systems, sanitation and disease control; planning housing facilities; producing quality forages and pastures and herd improvement.

AGR 381. (Formerly AGR 281.) Greenhouse Operation and Management. Five hours. I.
Plant propagation and growing techniques in a greenhouse. The student also learns operation procedures and the economics of operating a greenhouse and using cold and hot frames.

AGR 382. (Formerly AGR 282.) Agricultural Power Systems. Five hours. I.
Operation, maintenance, and repair of agricultural power machinery and tractor systems including hydraulics, electrical circuity, carburetion, lubrication, cooling systems and diesel operation; includes methods of environmental control.

AGR 390. Advanced Dairy Herd Management. Five hours. II.
Marketing milk, milk sanitation, and applied bacteriology, butterfat, testing, laboratory tests, dairy plant operations, artificial insemination, DHIA testing, operation of milk cooperates and other related business will be studied. Emphasis will be on both practices and managerial techniques.

AGR 391. Landscape Methods and Related Businesses. Five hours. II.
Elements of design and the execution of the landscape architect plan. Additional emphasis will be placed on occupations related to ornamental horticulture including turf maintenance, specialized flower production, park and roadside management and industrial grounds management.

AGR 392. Agricultural Mechanization Systems. Five hours. II.
Principles and planning materials handling systems, drying systems, water pumps and systems, lighting and ventilation systems and feed mixing systems used in agricultural production. Student experiences many different kinds of agricultural mechanical systems.

AGR 410. Special Problems Seminar. One-three hours. I, II.
The students choose a problem and work under the supervision of the instructor in the field of the problem.

AGR 411. Seminar on Emerging Agricultural Technology. **One hour.** I.
This course provides students an opportunity to study managerial, technological, and consumer trends in agriculture.

AGR 440. Agricultural Financing. **Three hours.** II.
Uses and types of agricultural credit, credit institutions, and relating credit needs to farm enterprises.

AGR 570. Advanced Study in Technical Agriculture. **Three-fifteen hours.** Five 3-hour segments. A.
Advanced Technical study in five agricultural areas with emphasis upon updating the technology and the development of understanding and the technical competency in:

AGR 570 a. Ornamental Horticulture. **Three hours.**

AGR 570 b. Agricultural Mechanization. **Three hours.**

AGR 570 c. Dairy Herd Management. **Three hours.**

AGR 570 d. Farm Livestock Management. **Three hours.**

AGR 570 e. Farm Service and Supplies. **Three hours.**

AGR 571. Production Management In Agriculture. **3 hours.** A.
Application of advanced technology in the production of agricultural products providing a means of updating in agricultural areas such as production methods, new equipment, economic trends and labor management.

AGR 577. Workshop in the Conservation of Natural Resources. **Three hours.** S.
Currently, this workshop is held four weeks in the summer for teachers returning for graduate work. Instruction is given in the areas of soil, water, fish and wildlife, and forest conservation and methods of teaching relating units at the elementary and junior high level.

HOME ECONOMICS (HEC)

R. Hill, Chairman; V. Buchholz, C. Calvert, E. Creamer, F. Francis D. Gates, P. Knapp, W. Moss, S. Snarr.

The Department of Home Economics offers general and specialty programs leading to a Bachelor of Science Degree and an Associate of Arts Degree. Graduates of this department qualify for a variety of professional positions in education, government, business, and industry. In addition, students may minor (non-teaching) in Home Economics by completing one of several series of specified courses.

In order to clarify the specialty programs in Home Economics, the Department separates its courses among five divisions. Courses in Home Economics are thus prefixed and numbered in the following manner:

HEC 00-29	Textiles and Design
HEC 30-49	Family Life and Child Development
HEC 50-59	Family Economics and Management
HEC 60-69	Home Economics Education
NFA 00-99	Nutrition, Foods, and Food Administration

Curricula in Home Economics with an area of concentration of 48 hours are: (1) Secondary Education, (2) Therapeutic Dietetics, and (3) General (18 and 18 hours, respectively, in two divisions and at least one course in each of the two other divisions exclusive of Home Economics Education).

Approved curricula for specialization in Home Economics with minors in other colleges are: Administrative Dietetics and Food Service Administration, both with minors in Business Administration; Child Development with a minor in Psychology and with or without certification for kindergarten teaching; and Textiles and Design with any of four minors (Art, Business Administration, Chemistry, or Journalism).

A student may meet minor requirements in Home Economics in:

(1) Nutrition, Foods, and Food Administration: NFA 201, 301, 403, 501, 503, 515 (1 credit); (select one) HEC 132, 202, 331, or 352

(2) Child Development: HEC 132, 241, 341, 342, 345, NFA 201; HEC or NFA elective

(3) Textiles and Design: HEC 202; series A or B; (select one) HEC 132, 331, or 352, or NFA 201
  A. HEC 320, 508, 519 (2 hours), elective in division (3 hours).
  B. HEC 102, 305, 312, 411 or 412, elective in division.

Areas of concentration, first majors with minors in other departments, and minors may be modified with the approval of the Chairman of Home Economics and the Dean of the College of Applied Arts and Technology. Students following an area of concentration, first major, minor, or Associate of Arts degree program must maintain a "C" average in HEC and NFA courses.

HOME ECONOMICS

Home Economics Education

(Teaching)

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
General education literature or restricted elective	0-3	ECO 230	3
GSS 248	3	EDF 317	4
HEC 305	3	HEC 341 or restricted elective	3
HEC 350 or HEC 351	3	HEC 350 or 351	3
HEC 353 or HEC-NFA elective	2	HEC 352	3
NFA 321 or BIO 301, 379	4	HEC 353 or HEC-NFA elective	2
	15-18		18

Fourth Year

ART 390, 391 or 392	3	EDU 462	4
ESH 366	4	EDU 463	10
HEC 453	3	ESH 453	3
HEC 322	3		
HEC 331	3		
HEC 341 or restricted elective	0-3		
	16-19		17

HOME ECONOMICS

Child Development

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
General education literature, HEC 202, or restricted elective	3-6	General education literature or restricted electives	3-6
HEC 342	3	HEC 331	3
PSY 213	3	HEC 347	3
Restricted PSY electives	6	PSY 301	3
		SOC 335	3
	15-18		15-18

Fourth Year

HEC 352	3	ELE 520** or electives	7-8
PSY 498	3	HEC 345	3
Restricted electives*	9-12	HEC 547	3-5
		HEC 548	1
	15-18		14-17

*HEC 538 (1 hour) plus electives except for students preparing for kindergarten teaching.

**For students in kindergarten teaching; hours required in ELE 520 may be reduced if student has had previous formal teaching experiences.

HOME ECONOMICS

Dietetics—Administrative* and Therapeutic†

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
BIO 221 or 273	4	General education humanities elective	3
General education literature or general education humanities elective	3	General education humanities elective or HEC 352	3
MGT 200* or restricted elective†	3	NFA 301	3
NFA 342	3	NFA 323† or restricted elective*	3
PSY 211	3	NFA 343	3
	16		15

Fourth Year

EDP 312* or NFA 403†	3	EPG 320* or elective†	3
HEC 331	3	NFA 502	3
HEC 352 or elective	3	NFA 503† or MGT 500*	3
NFA 501	3	NFA 515† or 555*	1
NFA 541	3	Electives	5
NFA 542	2		
	17		15

*American Dietetics Association Concentration A.

†American Dietetics Association Concentration C.

HOME ECONOMICS

Food Service Administration

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
BIO 221 or 273	4	General education humanities elective	3
General education literature or general education humanities elective	3	General education humanities elective or HEC 202	3
MGT 200 or restricted elective	3	MGT 200 or HEC 352	3
NFA 342	3	NFA 343	3
PSY 211	3	NFA 344	3
	16		15

Fourth Year

EDP 312 or MGT 500	3	EDP 312 or MGT 500	3
HEC 202 or elective	3	NFA 323 or NFA 556	3
HEC 331	3	NFA 555	1
HEC 352 or elective	3	Electives	9
NFA 541	3		
NFA 542	2		
	17		16

HOME ECONOMICS

Textiles and Design

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
HEC 305 or General education literature	3	General education literature elective	1-4
HEC 320	3	HEC 352	3
Restricted electives*	9-11	HEC (textiles) elective	3
		Restricted electives*	7-9
	15-17		14-19

Fourth Year

HEC 508	5	HEC 331	3
HEC (textiles) elective	3	HEC 510	3
Restricted electives	9	Electives	9
	17		15

*Restricted electives are chosen according to the minor selected.

FOOD SERVICE TECHNOLOGY

This curriculum has been designed to prepare men and women for supervisory positions in food service establishments. The program combines technical food service management and general education courses that lead to an Associate of Arts Degree.

First Year

First Semester	Hours	Second Semester	Hours
ACC 108	3	BIO elective	4
CHE 101	4	GSE 102	3
GSE 101	3	MGT 200 or SPE 100	3
GSO 100	1	NFA 201	2
NFA 121	3	SPE 100	3
MIL 101 (men) or Elective (women)	2	MIL 102 (men) or Elective (women)	2
	16		17

Second Year

BIO 221 or 273	4	BUS elective	3
HEC 202, 331, or 352	3	NFA 241	3
NFA 341	4	NFA 343	3
NFA 342	3	NFA 344	3
MIL 201 or option (men) or elective (women)	2	PSY 211	3
		MIL 202 or option (men) or elective (women)	2
	16		17

Summer Session	Hours
NFA 242	2

CHILD CARE

This Associate of Arts degree program is designed for persons desiring academic preparation to teach or assist in a day care center or in a center for culturally deprived children in a position not requiring professional education certification, and to work with those agencies responsible for licensing and certifying personnel in centers for young children.

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	ANT 201	3
GSO 100	1	ART 117	3
HEC 132	3	GSE 102	3
HEC 141	2	NFA 201	2
HEC 231	2	SOC 231	3
SPE 100	3	MIL 102 (Men) or Elective (Women)	2
MIL 101 (Men) or Elective (Women)	2		
	16		16

Second Year

HEC 241	3	HEC 243	3
LIB 301	3	HEC 341	3
PSY 211	3	HEC 345	3
SOC 335 or Elective	3	HEC 347	3
Elective	2	SOC 335 or Elective	3
MIL 201 or option (Men) or elective (Women)	2	MIL 202 or option (Men) or elective (Women)	2
	16		17

HOMEMAKING SUPERVISION*

The homemaking supervision curriculum, a 2-year Associate of Arts degree program, is designed for individuals wishing to work on the state level to train "Homemakers", a classification of Case-Aide who consults with families offering practical help in all general problems involving the home life. Individuals with this degree could also be employed as specialized aides in certain phases of the operation of child day centers, and as aides to Home Economists working in industry and in other community services.

First Year

First Semester	Hours	Second Semester	Hours
CHE 101	4	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	HEC 202	3
GSP 180	1	HEC 132 or HEC 231	2-3
HEC 102	3	NFA 201	2
HEC 132 or HEC 231	2-3	SPE 100	3
NFA 121	3		
	17-18		14-15

Second Year

ECO 230	3	HEC 320 or NFA 321	3-4
HEC 320 or NFA 321	3-4	HEC 331 or HEC 341	3
HEC 331 or HEC 341	3	HEC 351 or HEC 352	3
HEC 351 or HEC 352	3	PSY 211	3
SOC 231	3	SOC 335 or restricted SOC elective	3
		Elective	2
	15-16		17-18

*Men students must meet Military Science requirements.

HOME ECONOMICS (HEC)

TEXTILES AND DESIGN

HEC 102. (Formerly HEC 203, 20 and Garment Making.) Clothing Selection and Construction. **Three hours.** I, II.

Principles of clothing selection and construction; application of design principles; selection of commercial patterns. Students passing the required By-Pass test will substitute another Textiles and Design course.

HEC 202. (Formerly 308 and 37.) Fundamentals of Textiles. **Three hours.** I, II.

Introduction to fibers and their qualities relative to the resulting fabrics; emphasis is placed on uses of materials.

HEC 305. (Formerly 34 and Tailoring and Design.) Techniques in Apparel. **Three hours.** I, II.

Prerequisites: HEC 102 and 202.

Introduction to problems in clothing the family; advance techniques in construction and fitting of family members; evaluation of commercial and remade apparel.

HEC 312. (Formerly HEC 512, 312, called Creative Pattern Design.) Flat Pattern Design. **Three hours.** II.

Prerequisite: HEC 305.

Original design with emphasis upon appropriate line, color, and texture for the individual.

HEC 320. Economics of Apparel. **Three hours.** I.

Prerequisite: HEC 202.

Apparel as studied from the standpoints of quality, cost, and care required; the organization of the clothing industry and its effect upon consumer costs.

HEC 322. (Formerly HEC 222.) Interior Decoration. **Three hours.** I, II.

Prerequisite: ART course.

History of interiors and furnishings; the visual elements and principles of design in relation to contemporary living; laboratory experiences.

HEC 411. Tailoring. **Three hours.** II.

Prerequisite: HEC 305.

Application of tailoring techniques to garments made from commercial patterns.

HEC 412. (Formerly HEC 555 and 455.) Costume Design. **Three hours.** I.

Prerequisite: HEC 312.

Application of art principles in color and line in design and construction of garments, with emphasis on draping.

HEC 414. Textile Merchandising. **Five hours.** A.

Prerequisites: Senior standing; Home Economics major or minor, in Textiles and Design.

Aspects of the retail sale of textile products. Lecture; practicum in a retail outlet.

HEC 508. Textile Testing and Evaluation. **Five hours.** I.

Prerequisites: CHE 102; HEC 202.

Chemical and physical tests of fibers and fabrics including dye properties and finishes. Study of textile legislation and standardization. Individual problems and projects.

HEC 510. Socio-Psychological Factors of Apparel. **Three hours.** II.

Prerequisite: HEC 320.

Social, cultural and psychological factors which influence personal satisfaction in the selection and use of apparel.

HEC 519. Special Problems in Textiles. **One to three hours.** I, II, S.

Prerequisite: Consent of instructor.

The student selects a problem and works under the supervision of the instructor, May be repeated by graduate students to a maximum of 6 hours.

FAMILY LIFE AND CHILD DEVELOPMENT

HEC 132. (Formerly HEC 208 and Personal Relationships in Home and Community.) Family Living. **Three hours.** I, II.

Stages of development of the individual family members and of the family as a unit; biological, cultural, and personal accomplishments (developmental tasks) of the family throughout the life cycle will be emphasized.

HEC 141. The Child: His Nature and His Needs. **Two hours.** I.

Prerequisite: Consent of instructor.

Introduction to understanding the nature of the young child; developmental stages of growth, needs that must be met at each stage, and effects of deprivation on subsequent development.

HEC 231. (Formerly Health 22 and 231.) Health and Home Care of the Sick. **Two hours.** I, II.

Health and the family; simple procedures for the care of patients in the home are stressed.

HEC 241. Prenatal and Infant Development. **Three hours.** I.

Growth and development in the prenatal and infant stages up to three years of age. Lecture, discussion, field trips and observation of infants and toddlers.

HEC 243. Preschool Experience. **Three hours.** II.

Prerequisite: Consent of instructor.

Practicum in preschools; introduction to the overall operation of selected preschools.

HEC 331. (Formerly HEC 307, the Family in the Home and Community.) Marriage and Family. **Three hours.** I, II.

Prerequisite: Junior standing.

Factors influencing marital adjustment; their relationships and implications for a successful life.

HEC 341. (Formerly HEC 303.) Development of the Preschool Child. **Three hours.** I, II.

Growth and development of the preschool child; case studies, observations, and participation experiences with culturally advantaged and disadvantaged children in preschools.

HEC 342. (Formerly HEC 304 and 402.) Child and Adolescent Development. **Three hours.** I.

Prerequisites: HEC 241 or 341.

Physical, mental, emotional, and social development of the child from school age through adolescence; cases studies, observations, and participation experiences with children culturally advantaged and disadvantaged.

HEC 345. Program Planning for Young Children. **Three hours.** II.

Prerequisite: HEC 241 or 341.

Planning experiences, including techniques and materials, to provide optimum educational environment appropriate to the age and background of the young child.

HEC 347. Parent Eduucation. **Three hours.** II.

Prerequisites: PSY 211, HEC 241 or 341.

Methods and materials useful in working with parent conferences and parent groups. Experiences include home visits, parent conferences and planning parent discussion groups; involvement in preschool programs as Child Care and Head Start.

HEC 538. (Formerly HEC 505 and 405.) Seminar in Family Life. **One to three hours.** A.

Prerequisite: Consent of instructor.

Students will be able to concentrate their interests in an intensive study of specific areas of family life. The main focus will be on the family and its interpersonal relationships. Group projects and study, panel discussions, and conferences may be used. May be repeated by graduate students to a maximum of 6 hours.

HEC 547. (Formerly HEC 507 and 407.) Organization and Administration of Preschools. **Three or five hours.** A.

Prerequisite: HEC 345.

Study of the history of preschool education and its present organization and administration. Participation in programs for preschool children.

HEC 548. (Formerly HEC 504, 404, 338, and Current Trends in Child Development.) Seminar in Child Development. **One to three hours.** A.

Prerequisites: HEC 241, 341 and six hours in Family Life and Child Development.

Current concepts and trends in child development; recent research and literature. May be repeated by graduate students to a maximum of 6 hours.

HEC 549. Special Problems in Child Development. **One to three hours.** A.

Prerequisites: HEC 548, and consent of instructor.

The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of 6 hours.

FAMILY ECONOMICS AND MANAGEMENT

HEC 350. (Formerly HEC 250.) The House. **Three hours.** I, II.

Historic, aesthetic, social, economical, and functional aspects of housing; family housing as affected by legislation, life cycle, physical and psychological needs with application to modern housing; planning for and evaluating a home.

HEC 351. (Formerly HEC 301 and 31.) Household Equipment. **Three hours.** I, II.

Standards for selecting and buying household equipment and small appliances; electricity and gas in the home; use, maintenance and care of equipment.

HEC 352. The Family as Consumers. **Three hours.** I, II.

Contemporary consumer behavior by families in our society; wise use of income, investments, savings, and credit. Advertising, organizations, and laws affecting the interests of the family as consumers.

HEC 353. (Formerly HEC 330.) Factors Affecting Home Management. **Two hours.** I, II.

Principles of management applied to individual and home situations; management of material resources in the family; decision-making; wise use of time, energy, abilities, and skills on the basis of optimum development of individuals.

HEC 453. (Formerly HEC 403.) Home Management Residence. **Three hours.** I, II.

Prerequisites: NFA 321, HEC 353.

Management of time, money, and energy in the practical situation of the home; projects may be assigned. Reservations for Turley House should be made several weeks in advance.

HEC 556. (Formerly Special Problems in Home Economics.) Special Problems in Family Economics and Management. **One to three hours.** A.

Prerequisite: Consent of instructor.

The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of six hours.

HOME ECONOMICS EDUCATION

HEC 566. Special Problems in Home Economics Education. **One to three hours.** I, II, S.

Prerequisite: Consent of instructor.

The student chooses a problem and works under the supervision of the instructor. May be repeated by graduate students to a maximum of six hours.

GRADUATE COURSES

HEC 660. Curriculum Development in Home Economics. **Three hours.** A.

Prerequisite: Consent of instructor.

Educational trends and their implications for home economics in the secondary school; principles of curriculum construction as applied to junior and senior high school home economics.

HEC 661. Supervision of Home Economics. **Three hours.** A.

Prerequisite: Consent of instructor.

Principles and techniques of effective supervision of home economics at different educational levels, with emphasis on supervision of student teaching.

HEC 662. Philosophy of Home Economics Education. **Three hours.** A.

Prerequisite: Consent of instructor.

Major ideas, trends, and past developments in home economics education and their influence and implications in the future directions of the field.

HEC 663. The Adult Homemaking Program. **Three hours.** A.

Prerequisite: Consent of instructor.

Materials, organization, and conducting homemaking programs for adults; use of appropriate instructional media.

HEC 665. Seminar in Home Economics Education. **One to three hours.** A.
Prerequisite: Consent of instructor.
Discussion of current topics and research relevant to home economics. May be repeated to a maximum of six hours.

HEC 667. Evaluation in Home Economics Education. **Three hours.** A.
Prerequisite: Consent of instructor.
Theories and techniques of evaluation; construction and interpretation of devices used to measure progress and attainment in home economics.

HEC 668. Research in Home Economics Education. **One to six hours.** A.
Prerequisite: Consent of instructor.
Independent research. May be repeated to total six hours.

NUTRITION, FOODS, AND FOOD ADMINISTRATION (NFA)

NFA 120. Basic Food Preparation. **Two hours.** I, II.
An introductory food course for non-majors and non-minors which will provide instruction in preparation of individual and family meals.

NFA 121. (Formerly HEC 204.) Introduction to Food Composition and Preparation. **Three hours.** I, II.
Composition of foods and their properties as they affect preparation. Scientific principles of food preparation.

NFA 201. (Formerly HEC 219.) Essentials of Nutrition. **Two hours.** I, II.
Basic nutrition and its application in meeting nutritional needs of all ages; consideration is given to food selection, food faddism, and problems of "over" and "under" nutrition.

NFA 241. (Formerly HEC 316.) Food Service Administration. **Three hours.** II.
Prerequisite: Consent of instructor.
Principles of food systems operation emphasizing financial and production controls, menu planning and technical operations. Field experiences.

NFA 242. (Formerly HEC 314.) Practicum. **Two hours.** A.
Prerequisites: NFA 241 and consent of instructor.
Supervised student participation in an approved food service institution.

NFA 301. (Formerly HEC 317.) Bio-Nutrition. **Three hours.** II.
Prerequisites: CHE 102 or 112; NFA 201.
Structures and properties of nutrients; introduction to their functions and interrelationships in metabolism.

NFA 302. Diet Therapy. **Three hours.** II.
Prerequisite: NFA 201.
The applied approach to dietary treatment for patients. Nutrition guidance and counseling techniques. Does not meet the therapeutic nutrition requirement for dietetic majors.

NFA 321. (Formerly HEC 215.) Meal Management. **Four hours.** I, II.
Prerequisites: NFA 121, 201.
Food management, planning, preparation and service of meals through management of time, energy, money, and efficient use of equipment. Consideration is given to nutritional needs, food habits, and social customs of family groups.

*Specialized course to continue through the academic year 1970-71 under its general Home Economics number.

NFA 323. (Formerly HEC 302.) Experimental Foods. **Three hours.** II.
Prerequisites: NFA 321 or 341; CHE 101 or equivalent.
Experimental procedures involving methods and techniques and their effects on the quality of products; individual problems dealing with the various aspects of food preparation.

NFA 341. Quantity Meal Management. **Four hours.** I.
Prerequisites: NFA 121, 201 and consent of instructor.

Planning and service of meals to large groups; nutritional needs are emphasized. Open to Nutrition, Foods, and Food Administration majors only.

NFA 342. (Formerly HEC 315.) Quantity Food Production. **Three hours.** I.
Prerequisite: NFA 341.

Principles and methods of preparation of food in quantity; use of standardized formulas and of institutional equipment. Field trips included.

NFA 343. (Formerly HEC 313.) Institutional Equipment and Furnishings. **Three hours.** II.
Prerequisite: NFA 342.

Fundamentals of planning food service layouts and furnishings for restaurants, hotels, hospitals and other institutions.

NFA 344. Institutional Food Purchasing. **Three hours.** II.
Prerequisites: NFA 342; ACC 108.

Principles and methods of purchasing foods for various types of quantity food services; emphasis on specifications and factors affecting quality; food cost control. Field trips included.

NFA 403. (Formerly HEC 410.) Maternal and Child Nutrition. **Three hours.** I.
Prerequisites: NFA 201 and three hours in Chemistry.

Nutrition of the mother and fetus, during pregnancy and the infant years through adolescence; observation of children at mealtimes.

NFA 501. Human Nutrition. **Three hours.** I.
Prerequisite: NFA 301.

Interrelationships and functions of nutrients in normal nutrition; relation of nutrient requirements at the cellular level to dietary standards.

NFA 502. (Formerly HEC 506 and 406 and Newer Knowledge of Nutrition.) Therapeutic Nutrition. **Three hours.** II.
Prerequisite: NFA 501.

Theory and application of deviations in normal dietary patterns in disease.

NFA 503. Community Nutrition. **Three hours.** II.
Prerequisites: NFA 201 and consent of instructor.

Nutrition services and education facilities in the community. Application of the principles of nutrition to the varied needs of representative groups; food and drug laws and their implications in combatting food faddism. Field experience.

NFA 515. (Formerly HEC 413.) Seminar in Nutrition. **One to three hours.** II.
Prerequisites: NFA 501 and consent of instructor.

Reports and discussions of current problems and of research in nutrition. May be repeated by graduate students to a maximum of six hours.

NFA 516. Special Problems in Nutrition. **One to three hours.** I, II, S.
Prerequisites: NFA 501 and consent of instructor.

The student chooses a problem and works under the supervision of an instructor. May be repeated by graduate students to a maximum of six hours.

NFA 541. (Formerly HEC 319.) Food Service Organization and Management. **Three hours.** I.
Prerequisites: ACC 108; NFA 342.

Principles of organization and their application to various types of institution; personnel management, financial and administrative problems.

NFA 542. (Formerly HEC 318.) Laboratory for Food Service Organization and Management. **Two hours.** I.
Prerequisite: Concurrent enrollment in NFA 541.

Supervised experience in planning, preparing and serving food in approved institutions.

NFA 555. (Formerly HEC 418.) Seminar in Food Administration. **One to three hours. II.**
Prerequisite: NFA 541.
Reports and discussions of topics relative to the area of food administration. May be repeated by graduate students to a maximum of six hours.

NFA 556. Special Problems in Food Administration. **One to three hours. I, II, S.**
Prerequisite: NFA 541.
The student chooses a problem and works under the supervision of an instructor. May be repeated by graduate students to a maximum of six hours.

INDUSTRIAL EDUCATION (IED)

C. Craft, Chairman; G. Brown, T. Brown, Botsford, Chastain, Davis, Lash, Luy, Martin, Myers, Ogle, Patrick, Rowlett, Spencer, Swinford, Weaver, Whalin.

The primary function of the Industrial Education Department is to prepare teachers of industrially oriented subjects for secondary and vocational-technical schools. Another function is to prepare personnel to staff the Manual Arts Therapy positions in the hospitals of the Veterans Administration.

The Industrial Arts Comprehensive Area Curriculum has as its purpose the preparation of general industrial arts teachers for schools offering broad diversified programs.

The Industrial Arts Specialized Area Curriculum has as its purpose the preparation of industrial arts teachers for schools where technician-teachers are desired and who possess greater depth in their respective areas.

The Associate of Arts Degree is awarded those who have completed the prescribed Vocational-Industrial and Technical Teacher Education Curriculum and 1,400 hours of approved and supervised related work experience or three years of approved related work experience. The purpose of this curriculum is to prepare teachers for the area vocational and technical schools of the state.

The Bachelor of Science Degree is awarded those who have completed the prescribed Vocational-Industrial and Technical Teacher Education Curriculum and 2,000 hours of approved and supervised work experience, or three years of approved related work experience. The purpose of this curriculum is to prepare teachers for the area vocational and technical schools of the state.

The purpose of the first major in Industrial Education is to give the future industrial arts teacher an opportunity to prepare to teach in another subject matter field.

The Manual Arts Therapy Curriculum has as its purpose the preparation of therapists with a broad background in industrial education with emphasis on the crafts.

INDUSTRIAL EDUCATION

Industrial Arts Comprehensive Area Major

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	IED 233	2
ENG LIT Elective	3	IED 326 or 467	3
IED 467 or 311	3	IED 343 or ENG 210 or 212	3
IED 372 or 351	3	IED 353 or 372	3
Social Science Elective	3	IED 382	3
	16		14

Fourth Year

Humanities Elective or IED 353	3	EDU 462	4
BIO 403 or 404	3	EDU 463	10
General Education Science Elective or IED 343	3	ESH 452	3
IED 394 or 326	3		
Social Science Elective	3		
	15		17

Industrial Education courses are to be elected to complete a total of 48 semester hours.

Curriculum for a First Major in Industrial Education

A student with a second major or minor in another department may complete the following courses for a first major in Industrial Education: Industrial Education 130, 141, 180, 191, 233, 242, 281, 292, 351, 394, and electives to total 36 hours.

INDUSTRIAL EDUCATION

Industrial Arts Specialized Area Major

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	BIO 403 or 404	3
ENG 210 or 212	3	IED 353 or 351	3
IED 311	3	IED 372	3
IED 351 or 242	3	IED Elective* or 281	3
Social Science Elective	3	Social Science Elective	3
	16		15

Fourth Year

Humanities Elective	3	EDU 462	4
IED Elective* or IED Elective* & 353	10	EDU 463	10
IED 467	3	ESH 452	3
	16		17

*To be elected from one major area.

A minimum of fifteen semester hours is required in one subject matter area in Industrial Education.

Industrial Education courses are to be elected to complete a total of 48 semester hours.

INDUSTRIAL EDUCATION

Manual Arts Therapy Major

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	BIO 301 and 378	4
ENG 210 or 212	3	General Education Science Elective	3
IED 311 or 351	3	IED 328 or 311	3
IED 326 or 281	3	IED 394 or 326	3
*Social Science Elective	3	*Social Science Elective	3
	16		16

Fourth Year

Humanities Elective	3	EDU 462	4
IED 312 or 328	3	**EDU 463	10
IED 372 or IED 394	3	ESH 452	3
PHE 320	2		
PSY 308	3		
	14		17

*Selected with approval of advisor to meet general education requirements.

**Includes minimum of 240 hours clinical experience in Veterans Administration Hospital.

Industrial Education courses are to be elected to complete a total of 48 semester hours.

INDUSTRIAL EDUCATION

Vocational-Industrial and Technical Teacher Education Major

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
ENG 210 or 212	3	Humanities elective	3
*IED elective	8-11	*IED elective	9
PSY 211	3	PSY elective (upper div.)	3
IED 261	0-2		
	16-17		15

Fourth Year

Humanities elective	3	IED 263	2
*IED elective	12	IED 364	3
		IED 463	10
	15		15

*Technical courses in Industrial Education as approved by advisor (18 semester hours maximum may be allowed by proficiency examination, 6 semester hours maximum may be allowed for supervised work experience.)

Work Experience: A graduate of this approved program shall have a minimum of 2,000 clock hours of planned and supervised work experience in the occupation in which he plans to teach, or a minimum of three years of approved work experience in the occupation in which he plans to teach.

INDUSTRIAL EDUCATION

Vocational-Industrial and Technical Teacher Education Major Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	General Education Laboratory Science	3
GSS 142	3	GSS 144	3
*IED Elective	6	*IED Elective	6
MAT 107 or IED 201	3	MIL 102 (Men) or Elective (Women)	2
MIL 101 (Men) or Elective (Women)	2		
	18		17

Second Year

General Education Laboratory Science	3	1st Nine Weeks	
IED 261	2	IED 263	2
*IED Elective	3	*IED Elective	3
MIL 201 or option	2	**IED Elective	2
PSY 211	3	MIL 202 or option	2
Humanities Elective	3	2nd Nine Weeks	
		IED 364	3
		IED 463	4
	16		16

*Technical courses in Industrial Education as approved by advisor (nine semester hours maximum permitted through proficiency examination, three semester hours may be supervised work experience.)

**From approved list.

Work Experience: A graduate of this associate degree program must have a minimum of three years of approved occupational experience in the occupation in which he plans to teach or a minimum of 1,400 clock hours of planned and supervised occupational experience in the occupation in which he plans to teach.

INDUSTRIAL EDUCATION (IED)

IED 130. Design Orientation. **One hour.** I, II.
Introduction to design theory and practice. Emphasis on using contemporary tools, materials, and technical processes in solving design problems.

***IED 141.** (INT 141) Elementary Woodwork. **Three hours.** I, II.
Basic instruction in the use of common hand tools; basic machine operations; problems in wood construction; woodturning; related technical information; finishing and characteristics of common hard and soft woods.

IED 160. Technical Occupations-Orientation and Survey. **Three hours.** A.
General survey of technical occupations; development, function, skill requirements, training, and trends.

***IED 180.** (INT 180) General Metalwork I. **Three hours.** I, II.
Basic hand and machine operations and related information in sheet metal, bench metal, art metal, arc and oxyacetylene welding; projects and problems in each area of activity.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 191.** (INT 191) Technical Drawing I. **Three hours.** I, II.
Basic technical drawing involving sketching, lettering, orthographic projection, pictorial representation, drafting techniques, tracing, and reproduction of drawings.

***IED 201.** (INT 201) Applied Mathematics in Technology. **Three hours.** I, II.
Mathematics involving an intensive study of applied algebra, geometry, and trigonometry with emphasis on the application of mathematics in the solution of technical problems.

IED 204. Related Science, Mathematics, and Technology in Occupations. I. **Three hours.** A.
Offered only through written examination; applicant must be eligible for vocational teaching certificate.

IED 205. Manipulative Skills in Occupations. I. **Three hours.** A.
Offered only through technical competence examination; applicant must be eligible for vocational teaching certificate.

IED 206. Knowledge of Related Subjects in Occupations. I. **Three hours.** A.
Offered only through oral examination; applicant must be eligible for vocational teaching certificate.

IED 233. Industrial Arts Design. **Two hours.** I, II.
Prerequisite: IED 191.
Study and application of the principles of three-dimensional design related to various media; emphasis placed on experimentation and problem-solving in developing design solutions; design and construction of projects involving both hand and mass production processes.

IED 241. General Woodworking. **Two hours.** I.
Basic operations and information units in hand and machine woodwork; common woods; care and maintenance of tools; finishing of woods; joinery and construction problems. Emphasis on woodworking as an avocation.

***IED 242.** (INT 242.) Intermediate Woodwork. **Three hours.** I, II.
Prerequisite: IED 141.
Advanced woodworking operations; instruction in the operation of woodworking machines; care and sharpening of tools; related technical information; construction and finishing of projects.

IED 243. General Woodworking II. **Two hours.** II.
Additional operations in machine and hand woodwork; joinery; related information; construction problems; finishing techniques and maintenance of equipment. Emphasis on woodworking as an avocation.

IED 261. Principles of Vocational-Industrial and Technical Teaching. **Two hours.** A.
Designed to acquaint the student with the historical developments, principles and practices related to teaching vocational-industrial and technical subjects.

IED 263. Trade and Technical Occupational Analysis. **Two hours.** A.
Involves the fundamental steps for analyzing trade and technical occupations in order to establish appropriate units of instruction.

IED 264. Instructional Materials. **Two hours.** A.
Selection and arrangement of teaching content; preparation of assignment, operation and information sheets; preparation of evaluative instruments.

***IED 281.** (INT 281) General Metalwork II. **Three hours.** I, II.
Basic hand tool and machine operations; foundry; forging; heat treating; machine shop projects and problems; related information in each area of activity.

***IED 283.** (INT 283.) Arc and Oxyacetylene Welding. **Three hours.** A.
Manipulative processes and related information basic to successful arc, oxyacetylene, and tungsten inert gas welding; metallurgy of welding; physical testing of weldments.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 292.** (INT 292) Technical Drawing II. **Three hours.** **I, II.**
Prerequisite: IED 191.

Preparation of detail and assembly drawings; production illustrations; screw threads and fasteners; shop processes; dimetric projections; secondary auxiliaries; reproduction processes and materials.

***IED 293.** (INT 293) Technical Drawing III. **Three hours.** A.
Prerequisite: IED 191.

Advanced drafting techniques with special emphasis on map drafting and elementary surveying.

IED 304. Related Science, Mathematics, and Technology in Occupations. II. **Three hours.** A.

Offered only through written examination; applicant must be eligible for vocational teaching certificate.

IED 305. Manipulative Skills in Occupations. II. **Three hours.** A.

Offered only through technical competence examination; applicant must be eligible for vocational teaching certificate.

IED 306. Knowledge of Related Subjects in Occupations. II. **Three hours.** A.

Offered only through oral examination; applicant must be eligible for vocational teaching certificate.

***IED 311.** (INT 311) Graphic Arts I. **Three hours.** I, II.

General graphic arts with emphasis on hand composition, elementary presswork, silkscreen principles, linoleum block printing, and bookbinding.

***IED 312.** (INT 312) Graphic Arts II. **Three hours.** I, II.
Prerequisite: IED 311.

Advanced graphic arts with emphasis on automatic machine printing; production techniques; photography; and offset lithography.

***IED 315.** (INT 315) Photography I. **Three hours.** A.

Picture composition, film developing, printing, enlarging, dodging, contract printing, photo finishing, study of and care for equipment and materials; visual instruction; planning of facilities. (Each student required to provide camera.)

IED 322. Industrial Arts for Elementary Teachers. **Three hours.** I, II.

Appropriate projects and media to provide enrichment for the elementary school subjects; instruction in the use of basic hand tools employed in the completion of correlated units of work.

IED 326. Crafts I. **Three hours.** I, II.

Introduction to various craft media; leather, art metal enameling; castolite; wood carving; the making of archery equipment; utilization of material applicable for playground use, community centers, and summer camps.

IED 328. Crafts II. **Three hours.** I, II.

Introduction to lapidary and jewelry work; cabochon cutting; grinding and polishing; faceting; design and construction of costume jewelry using silver, copper, and gold; centrifugal casting using the lost wax process.

IED 343. Advanced Woodwork I. **Three hours.** I, II.
Prerequisite: IED 242.

Additional practice in furniture construction involving skill in the use of machines and hand tools; joinery; bending and laminating wood; finishing; wood technology; maintenance of equipment.

***IED 351.** (INT 351) Fundamentals of Applied Electricity. **Three hours.** I, II.

Principles of static and current electricity; measures of electricity; heat, light, and power applied to the planning and construction of electrical installations.

***IED 352.** (INT 352) Electrical Power and Motor Repair. **Three hours.** A.
Prerequisite: IED 351.

Generation and distribution of electricity; power distribution systems; maintenance and repair of electrical motors.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 353.** (INT 353) Introduction to Electronics. (Formerly called Introduction to Radio and Electronics.) **Three hours.** I, II.

Prerequisite: IED 351.

Fundamentals of vacuum tubes; semiconductor devices, AM radio receivers, and servicing techniques.

IED 360. Principles of Vocational Guidance. **Three hours.** A.

Methods and techniques involved in exploring, selecting, preparing for, entering upon, and succeeding in a vocation; designed for vocational teachers and administrators.

IED 363. Evaluation in Vocational and Technical Education. **Three hours.** A.

Methods of evaluation; preparation of measuring devices; methods of assessing technical competency; interpretation of standardized test results; statistical analyses of test data and the improvement of instruction.

IED 364. Methods in Industrial Education. **Three hours.** A.

Presentation and application of instructional materials, methods, techniques and devices relevant to teaching vocational-industrial and technical subjects.

IED 365. Philosophy of Vocational-Industrial and Technical Education. **Three hours.** A.

Nature and purpose of the practical arts and vocational-industrial and technical education; their relationships and differences; the place of each in preparing people for the world of work.

IED 366. Instructional Aids in Vocational-Industrial and Technical Education. **Three hours.** A.

Selection, development, analysis, cataloging, and use of commercial and self-made instructional materials suitable for vocational-industrial and technical education.

IED 367. Supervised Work Experience in Industry. **One to six hours.** A.

Supervised employment in industry. Assignments individually arranged by University coordinator and the cooperating industry. Written reports required.

IED 368. Workshop in Vocational-Industrial and Technical Education. **Two to six hours.** A.

Laboratory approach which provides opportunities for experienced educational personnel to concentrate their study on practical problems in vocational-industrial and technical education.

***IED 372.** (INT 372) Power Mechanics I. **Three hours.** I, II.

Prerequisite: IED 351.

Principles of power sources and basic mechanisms; disassembly, inspection, measurement, adjustment, and tune-up of the two and four cycle small gasoline engine.

***IED 373.** (INT 373) Power Mechanics II. **Three hours.** I, II.

Prerequisite: IED 372.

Study of the multi-cylinder engine; fuels and fuel systems, lubrication, cooling, ignition, tests, tune-up, adjustment, and minor repair.

***IED 382.** (INT 382) Machine Shop Practice I. **Three hours.** I, II.

Prerequisite: IED 281.

Projects and problems involving machine operations on the lathe; bench work; blueprint reading; precision measurement; related technical information.

***IED 394.** (INT 394) Architectural Drawing I. (Formerly called Elementary Architectural Drawing.) **Three hours.** I, II.

Prerequisite: IED 191.

Basic principles of house planning; styles of home architecture; comparative study of building materials; preparation of a complete set of plans and specifications for a small home.

***IED 395.** (INT 395) Descriptive Geometry. **Three hours.** A.

Prerequisite: INT 191 or consent of instructor.

Application of the theory or orthographic projection to the graphical representation and solution of three-dimensional problems.

***Credit is to be granted for only one of these cross-listed courses.**

***IED 411.** (INT 411) Graphic Arts III. **Three hours.** A.
Prerequisite: IED 312.

Advanced photography; off-set lithography; graphic arts materials and processes; printing management; current trends in the graphic arts industry.

***IED 451.** (INT 451) Industrial Electronics I. **Three hours.** I.
Prerequisite: IED 353.

Principles of timing, control circuitry, transducers, polyphase system, and gaseous tubes as applied to industrial and commercial installations.

***IED 452.** (INT 452) Industrial Electronics II. **Three hours.** II.
Prerequisite: IED 451.

Applications of industrial control circuitry: generation of electricity; power distribution systems; maintenance and repair of electrical devices.

***IED 454.** (INT 454) Communications Electronics I. (Formerly called Advanced Radio and Electronics I.) **Three hours.** I.
Prerequisite: IED 353.

Advanced radio communication receiving principles; quality audio re-producing devices; transmitter procedures; transmitting antennas; communications systems; and electronics servicing techniques.

***IED 455.** (INT 455) Communications Electronics II. (Formerly called Principles of Television.) **Three hours. II.**
Prerequisite: IED 454.

Principles of television; antenna theory and installation; closed circuit television operation; and television servicing techniques.

IED 460. Seminar in Vocational-Industrial and Technical Education. **Three hours.** A.

Individual and group investigations of current problems and issues in the field of vocational-industrial and technical education. Each student will be expected to plan and complete a minor research project and present his findings to the seminar.

IED 463. Supervised Student Teaching in Vocational-Industrial and Technical Education. **Four to ten hours.** A.

Observation, participation, and supervised teaching in vocational-industrial and technical education. Includes experiences in lesson planning, classroom management, record keeping, development and use of instructional materials, and directed teaching in approved centers.

IED 467. Problems and Practices of the General Shop. **Three hours.** I, II.

Planning and organization of physical laboratory facilities with emphasis on the comprehensive general shop and the general unit shop. Preparation of instructional materials; instructional techniques; development and use of visual aids.

***IED 471.** (INT 471) Power Transmission. **Three hours.** A.
Prerequisite: IED 373.

Principles of mechanical, electrical and fluid power transmission. Disassembly, inspection, and adjusting of mechanical transmission units; construction of fluid power circuits emphasizing their application to modern machines.

***IED 472.** (INT 472) Chassis and Electrical Systems. **Three hours.** A.
Prerequisite: IED 373.

Detailed study and application of starting, charging, lighting, and accessory circuits; suspension, brakes, power brakes, steering, power steering, air conditioning.

***IED 487.** (INT 487) Machine Tool Processes II. **Three hours.** A.
Prerequisite: IED 382.

Continuation of IED 382 with increased emphasis on machine tool operations; gear cutting; tool and cutter grinding; problems in tool making; related technical information.

***IED 488.** (INT 488) Machine Tool Processes III. **Three hours.** A.
Prerequisite: IED 487.

Advanced machine tool operations and tool making; heat treating of metals; related technical studies and metrology.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 489.** (INT 489) Characteristics and Maintenance of Machine Tools. **Two hours.** A.

Prerequisite: IED 487.

Machine design and construction; installing; servicing; powering and rebuilding machine tools.

***IED 492.** (INT 492) Technical Drawing IV. **Three hours.** I.

Prerequisite: IED 292.

Advanced machine drafting dealing with detail and assembly drawings, patent drawing, production illustrations, and tool design.

***IED 496.** (INT 496) Architectural Drawing II. **Three hours.** II.

Prerequisite: IED 394.

Preparation of complete plans and specifications for small commercial and large residential buildings; emphasis on modern methods and materials utilized in the building industry; illustrative rendering; structural modeling.

***IED 501.** (INT 501) Special Problems in Industrial Education. **Three hours.** I, II.

A course for graduate and exceptional undergraduates involving independent study and research related to problems of a theoretical and/or practical nature.

***IED 502.** (INT 502) Industrial Materials and Processes. **Three hours.** A.

Characteristics, utilization and processing of industrial materials such as wood, metals, plastics, clay, glass, concrete, etc.; composition and working qualities; types, grades, availability, and suitability of materials for varying purposes; shaping, forming, cutting, and finishing processes; quality, prices and control of materials and products.

***IED 511.** (INT 511) Advanced Technical Problems in Graphic Arts. **Two-six hours.** I, II.

Technical instruction in the graphic arts field. Recent developments, advanced technical and experimental problems and preparation of technical reports in graphic arts.

***IED 533.** (INT 533) Workshop in Industrial Education. (Formerly called Workshop in Industrial Arts.) **Four hours.** A.

533a Design; 533b Graphic Arts; 533c Plastics; 533d Power Mechanics; 533e Electronics; 533f Wood Technology; 533g Metals; 533h Crafts; 533i Professional. (Formerly Industrial Arts 433a, 433b, 433c, 433d, 433e, 433f, 433g, 433h, 433i.)

IED 540. Wood Technology. **Three hours.** A.

The technology of wood; includes structure, composition, and properties of wood; wood seasoning and preservation; machining characteristics of wood.

***IED 541.** (INT 451) Advanced Technical Problems in Woodworking. **Two-six hours.** I, II.

Technical instruction in the woodworking field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in woodworking.

IED 544. Machine Woodworking. **Two hours.** A.

Prerequisite: IED 242.

Special machine operations; repairing and servicing power woodworking machinery.

***IED 551.** (INT 551) Advanced Technical Problems in Electricity-Electronics. **Two-six hours.** I, II.

Technical instruction in the electricity-electronics field; recent developments, advanced technical and experimental problems, and preparation of technical reports in electricity-electronics.

***IED 561.** (INT 561) Evaluation in Technical Education. **Three hours.** A.

Methods of evaluation in technical education; elementary statistical procedures; preparation and use of measuring devices; assessing technical competency, creativeness, quality, and quantity; analysis and interpretation of test results.

IED 563. Planning of Technical Education Facilities. **Two hours.** A.

Principles and practices underlying the planning and designing of shops and laboratories for vocational, industrial, and technical education.

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*Credit is to be granted for only one of these cross-listed courses.

IED 564. History and Philosophy of Industrial Education. **Three hours.** A.

History of industrial education from its early beginning to the present; the contributions of leaders; movements in the development of industrial and vocational education; modern concepts of industrial education.

***IED 571.** (INT 571) Advanced Technical Problems in Power Mechanics. **Two-six hours.** I, II.

Technical instruction in the power mechanics field; recent developments; advanced technical and experimental problems, and preparation of technical reports in power mechanics.

***IED 581.** (INT 581) Advanced Technical Problems in Metalworking. **Two-six hours.** I, II.

Technical instruction in the metalworking field; recent developments, advanced technical and experimental problems, and preparation of technical reports in metalworking.

***IED 591.** (INT 591) Advanced Technical Problems in Drafting. **Two-six hours.** I, II.

Technical instruction in the drafting field; recent developments, advanced technical and experimental problems, and preparation of technical reports in drafting.

GRADUATE COURSES

***IED 611A.** (INT 611A.) Advanced Technical Study in Printing Technology: Photography. **Three hours.** A.

Advanced technical study, research and experimentation in photography; cameras and lenses, filters, films, enlarging, dodging, and finishing; color photography; darkroom techniques.

***IED 611B.** (INT 611B.) Advanced Technical Study in Printing Technology: Layout and Design. **Three hours.** A.

Advanced technical study, research and experimentation in layout and design; concepts of graphic design related to newspapers, books, brochures, flyers, and posters; practical experience in design and layout of graphic presentations.

***IED 611C.** (INT 611C.) Advanced Technical Study in Printing Technology: Color Separation. **Three hours.** A.

Advanced technical study, research and experimentation in color separation; copy preparation, camera techniques, developing, stripping, platemaking, and press operations.

***IED 611D.** (INT 611D.) Advanced Technical Study in Printing Technology: Photo-Offset-Lithography. **Three hours.** A.

Advanced technical study, research and experimentation in photo-offset-lithography; inks, fountain solutions, films, chemicals, type methods, layout, stripping, camera techniques, and platemaking.

***IED 611E.** (INT 611E.) Advanced Technical Study in Printing Technology: Quality Control. **Three hours.** A.

Advanced technical study, research and experimentation in printing quality control; plant layout, temperature, humidity, chemicals, papers, and photographic materials.

***IED 633.** (INT 633.) Creative Problem-Solving in Technical Fields. **Three hours.** A.

A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to industrial teaching and industrial problem-solving.

***IED 641A.** (INT 641A.) Advanced Technical Study in Wood Technology: Structure and Characteristics. **Three hours.** A.

Advanced technical study, research and experimentation in structure and characteristics of wood; species, chemical composition, botanical structure, physical characteristics, and identification techniques.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 641B.** (INT 641B.) Advanced Technical Study in Wood Technology: Dimensional Stability. **Three hours.** A.

Advanced technical study, research and experimentation in dimensional stability of wood; moisture content effects and control, strength and density, seasoning, and drying defects.

***IED 641C.** (INT 641C.) Advanced Technical Study in Wood Technology: Veneer and Plywood Production. **Three hours.** A.

Advanced technical study, research and experimentation in veneer and plywood production; veneer production and specifications; strength characteristics, specifications, grades, and uses of hardwood and softwood plywood; grading and production processes.

***IED 641D.** (INT 641D.) Advanced Technical Study in Wood Technology; Wood Substitutes. **Three hours.** A.

Advanced technical study, research and experimentation in wood substitutes; composition and characteristics of hardboard, particle board and plastic laminates; material specifications; principles of application to industrial use.

***IED 641E.** (INT 641E.) Advanced Technical Study in Wood Technology: Adhesives. **Three hours.** A.

Advanced technical study, research and experimentation in wood adhesives, types, characteristics and application techniques of natural and synthetic adhesives; joinery and control factors; curing and comparative testing.

***IED 651A.** (INT 651A.) Advanced Technical Study in Electricity/Electronics Technology: Solid State Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in solid state electronics; amplifying devices; solid state and integrated circuit analysis and design.

***IED 651B.** (INT 651B.) Advanced Technical Study in Electricity/Electronics: Computer Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in computer electronics; digital systems, logic, component functions, memory systems, and control circuitry.

***IED 651C.** (INT 651C.) Advanced Technical Study in Electricity/Electronics: Communicative Systems. **Three hours.** A.

Advanced technical study, research and experimentation in electronic communicative systems; signal analysis, transmission and modulation; intelligence and navigational transmission and reception; trouble shooting analysis and procedures.

***IED 651D.** (INT 651D.) Advanced Technical Study in Electricity/Electronics: Microwave Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in microwave electronics; field phenomena; equipment components and characteristics; measurement techniques; communication systems.

***IED 651E.** (INT 651E.) Advanced Technical Study in Electricity/Electronics: Instrumentation. **Three houurs.** A.

Advanced technical study, research and experimentation in instrumentation; measurement concepts; industrial considerations; electrical and electronic instruments and applications; control and regulation systems.

IED 661. Supervision in Technical Education. **Three hours.** A.

Principles, objectives, methods, techniques, and practices of supervision; specific problems in the supervisor of technical education; selecting and organizing materials; planning and equipping education facilities; professional relations and in-service education.

IED 662. Philosophy of the Practical Arts and Vocational Education. **Three hours.** II.

Background, purpose and philosophies of the practical arts and vocational education; relationship to general education; effects of legislation for the practical arts and vocational education; the state plan.

IED 663. Organization and Administration of Technical Education. **Three hours.** A.

Organization of industrial education on the local, state, and national level; federal legislation in technical education; federal-state relationship; types of technical, vocational, and general industrial education programs and schools.

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*Credit is to be granted for only one of these cross-listed courses.

IED 664. Special Problems in Industrial Education. (Formerly Special Problems in Industrial Arts.) **One-six hours. I, II.**

Problems of particular value to the teacher in the field, both of a practical and of a research nature, will be pursued by the student and developed through conferences and activities directed by the staff.

IED 665. Curriculum Practices and Trends in Industrial Education. (Formerly Curriculum Practices and Trends in Industrial Arts.) **Three hours. I.**

Current concepts and trends in industrial education; principles underlying curriculum construction and development; long range planning for improvement of programs.

IED 666. Seminar in Industrial Education. **Three hours. I.**

A course for the graduate student in industrial education. Current problems and issues in the total field of industrial education will be studied with an emphasis placed on identifying their philosophical and/or psychological dimensions. Research techniques appropriate for industrial education with an emphasis on experimental design and statistical procedures of analysis. Each student will be expected to plan and complete a minor research paper, and to present his findings to the seminar.

IED 667. Thesis Research in Industrial Education. (Formerly Thesis Research in Industrial Arts.) **Four-Six hours. I, II.**

Students preparing theses are expected to register for three hours of thesis research in each of two semesters.

***IED 681A.** (INT 681A.) Advanced Technical Study in Metals Technology: Industrial Metrology. **Three hours. A.**

Advanced technical study, research and experimentation in industrial metrology; precision measurement equipment and techniques; high amplification pneumatic, electronic, mechanical, and optical comparators; interferometry, radiography and monochromatic light techniques.

***IED 681B.** (INT 681B.) Advanced Technical Study in Metals Technology: Tool Design. **Three hours. A.**

Advanced technical study, research and experimentation in tool design; design and fabrication of tooling jigs, fixtures and dies; modern metal forming production techniques; efficiency in machine utilization; heat treatment of metallic substances.

***IED 681C.** (INT 681C.) Advanced Technical Study in Metals Technology: Materials Testing. **Three hours. A.**

Advanced technical study, research and experimentation in materials testing; nondestructive tests including Zyglo, Magniglo, dye penetrant, magniflux, X-ray, utrasonic, nucleonic, and radiographic; destructive tests including tensile strength, compression, shear, torsion, and impact resistance; specimen preparation.

***IED 681D.** (INT 681D.) Advanced Technical Study in Metals Technology: Mechanical Power Transmission. **Three hours. A.**

Advanced technical study, research and experimentation in mechanical power transmission devices; properties and design application of the involute curve; gear types; spherical and planetary application systems; design and fabrication of power transmission devices.

***IED 681E.** (INT 681E.) Advanced Technical Study in Metals Technology: Assembly Processes. **Three hours. A.**

Advanced technical study, research and experimentation in metals assembly processes; adhesive bonding and seals; mechanical fasteners and components; brazing, soldering and welding techniques; pneumatic and hydraulic assembly applications.

***IED 691A.** (INT 691A.) Advanced Technical Study in Drafting Technology: Theory of Projection I. **Three hours. A.**

Advanced technical study, research and experimentation in drafting projection theory; Mongean method and adaptations; positional change and theorems; force systems; Bow's notation; Pappus and Guldinus Theorem; four-dimensional descriptive geometry.

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*Credit is to be granted for only one of these cross-listed courses.

***IED 691B. (INT 691B.) Advanced Technical Study in Drafting Technology: Theory of Projection II. Three hours. A.**

Continuation of IED 691A; axonometric, oblique, perspective, and stereographic projection; shades and shadows applied to pictorial representation.

***IED 691C. (INT 691C.) Advanced Technical Study in Drafting Technology: Advanced Illustration. Three hours. A.**

Advanced technical study, research and experimentation in industrial illustration; media; pencil, ink, Zip-a-tone, scratchboard, double and triple-tone board, coquille board, intaglio, airbrush, and planographic impression techniques; photo retouching; problems analysis; preparation of presentations.

***IED 691D. (INT 691D.) Advanced Technical Study in Drafting Technology: Drafting Reproduction Processes. Three hours. A.**

Advanced technical study, research and experimentation in drafting reproduction processes; exposure and development systems; dry and moist diazo, blueprint, Van Dyke, azograph, offset, microfilm, photostat, and reflex processes.

***IED 691E. (INT 691E.) Advanced Technical Study in Drafting Technology: Drafting Standards. Three hours. A.**

Advanced technical study, research and experimentation in drafting standards; study and comparison of ASA, military, SAF, AWS, and selected industrial standards; influences affecting standards; preparation of standards for a manufacturing or architectural establishment.

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*Credit is to be granted for only one of these cross-listed courses.

INDUSTRIAL TECHNOLOGY (INT)

K. Hansson, Chairman; Clark, Gilliland, Joyner, Masterson, Prewitt, Sexton, Torbett, Way.

The primary function of the Industrial Technology Department is to prepare persons for entrance into technical occupations. Curricula are designed for those who do not wish to teach, but who desire to secure gainful employment in industry.

The Industrial Technology Curriculum combines a broad and balanced technical program with a sound foundation in mathematics, natural sciences, social sciences, and communications in order to prepare the individual to cope with a wide range of industrial problems.

A first major, second major, or minor in Industrial Technology enables an individual to complement specialized technical preparation in a specific subject matter area with preparation in business organization and management, mathematics, or the sciences.

The two-year curricula, leading to an Associate of Arts Degree, are designed for students who wish to prepare for gainful employment in certain industrial occupational areas in less than four years. Emphasis in each curriculum is placed on specialized technical preparation. Courses included in each program may be later credited toward a Bachelor of Science Degree.

INDUSTRIAL TECHNOLOGY CURRICULUM

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
ECO 230	3	ENG 210 or 212	3
ENG 209 or 211	3	*Humanities Elective	3
*INT Elective	6	*INT 141 or General Elective	3
PHY 132	5	INT 372	3
		*INT Elective	6
	17		18

Fourth Year

BIO 403 or 404	3	*General Elective	8–11
*General Elective	4–6	*INT Elective	6
*INT Elective	6		
	13–15		14–17

*A minimum of thirty-one hours must be selected from Upper Division Courses.

INT electives should be selected so that at least thirty semester hours will be divided between two of the following departmental areas: architectural drawing, technical drawing, communications electronics, industrial electronics, graphic arts, and metals.

Curriculum for a First Major in Industrial Technology*

A student with a second major or a minor in another field may take the following courses for a first major in Industrial Technology: INT 191, 311, 351, 372, plus the required courses in one area of specialization as follows:

Drafting with emphasis in:

Technical Drawing: INT 205, 281, 292, 395, 492, Elective (3 hours).

Architectural Drawing: AGR 362; INT 205, 292, 293, 394, 395, 496.

Electricity-Electronics with emphasis in:

Communications: INT 180, 353, 454, 455, Elective (6 hours).

Industrial Electronics: INT 180, 352, 353, 451, 452, Elective (3 hours).

Metals: INT 281, 283, 292, 382, 487, 488.

Graphic Arts: INT 180, 205, 312, 315, 411, Elective (3 hours).

*Students planning to follow this curriculum should consult with the head of the Industrial Technology Department.

Curriculum for a Second Major or Minor in Industrial Technology*

A student with a first major or minor in another field may take the following courses for a second major or minor in Industrial Technology:

With emphasis in Technical Drawing:
INT 191, 205, 281, 292, 293, 395, 492, Elective (3 hours).

With emphasis in Architectural Drawing:
AGR 362; INT 191, 205, 292, 293, 394, 395, 496, Elective (3 hours).

With emphasis in Communications Electronics:
INT 180, 191, 351, 353, 454, 455, Elective (6 hours).

With emphasis in Industrial Electronics:
INT 180, 191, 351, 352, 353, 451, 452, 372.

With emphasis in Metals:
INT 191, 281, 283, 292, 351, 382, 487, 488.

With emphasis in Graphic Arts:
INT 191, 205, 311, 312, 315, 351, 411, Elective (3 hours).

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*Students planning to follow this curriculum should consult with the head of the Industrial Technology Department.

INDUSTRIAL TECHNOLOGY

BROADCAST ENGINEERING TECHNOLOGY

Curriculum with a major in Broadcast Engineering Technology leading to an Associate of Arts Degree.

First Year

First Semester	Hours	Second Semester	Hours
General Education Elective	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	INT 352	3
GSP 180	1	INT 353	3
INT 351	3	MAT 109	5
JOU 200	3	MIL 102	2
MIL 101	2		
	16		17

Summer Term
INT 225A 2 or 4

Second Year

INT 454	3	General Education Elective	3
INT 220A	3	INT 220B	3
MIL 201 or Option	2	INT 455	3
PHY 131	5	MIL 202 or Option	2
SPE 290	3	SPE 390 or 395	3
	16		14

DRAFTING AND DESIGN TECHNOLOGY

Curriculum with a major in Drafting and Design Technology leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	INT 106	1
INT 105	1	INT 292	3
INT 191	3	INT 394	3
INT 201 or Elective	3	MAT 109	5
INT 281	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

ART 117	3	ECO 230	3
INT 395	3	INT 205	3
MIL 201 or Option	2	INT 293	3
OAD 101	3	MIL 202 or Option	2
PHY 131	5	PHY 132	5
	16		16

DRAFTING TECHNOLOGY

Curriculum with a major in Drafting Technology leading to an Associate or Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSC 171	3	GSC 172	3
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	INT 106	1
INT 105	1	INT 292	3
INT 191	3	INT 394	3
INT 281	3	MIL 102	2
MIL 101	2		
	17		16

Second Year

ART 117	3	ECO 230	3
Social Science Elective	3	General Elective	3
INT 201	3	Social Science Elective	3
INT 395	3	INT 293	3
MIL 201 or Option	2	INT 205	3
OAD 101	3	MIL 202 or Option	2
	17		17

ELECTRONICS TECHNOLOGY

Curriculum with a major in Electronics Technology leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	GSP 181	1
GSP 180	1	INT 106	1
INT 105	1	INT 352	3
INT 191	3	INT 353	3
INT 201 or Elective	3	MAT 109	5
INT 351	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

EDP 410	3	ECO 230	3
INT 451 or 454	3	INT 372	3
MIL 201 or Option	2	INT 452 or 455	3
OAD 101	3	MIL 202 or Option	2
PHY 131	5	PHY 132	5
	16		16

APPLIED ELECTRONICS TECHNOLOGY

Curriculum with a major in Applied Electronics Technology leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSC 171	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	INT 106	1
GSP 180	1	INT 201	3
INT 105	1	INT 352	3
INT 191	3	INT 353	3
INT 351	3	MIL 102	2
MIL 101	2		
	17		16

Second Year

EDP 312	3	ECO 230	3
EDP 410	3	General Elective	3
GSC 172	3	Social Science Elective	3
Social Science Elective	3	INT 372	3
INT 451 or 454	3	INT 452 or 455	3
MIL 201 or Option	2	MIL 202 or Option	2
	17		17

INSTRUCTIONAL MEDIA TECHNOLOGY

Curriculum with a major in Instructional Media Technology leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
ART 117	3	General Education Elective	3
ESH 125	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	INT 205	3
GSP 180	1	INT 220C	3
INT 191	3	MIL 102	2
MIL 101	2	SPE 290	3
	16		18
Summer Term			
INT 225B	2 or 4		

Second Year

ART 317 or 321	3	General Education Elective	3
ESH 126	3	INT 220D	3
EDF 202	3	INT 311	3
INT 351	3	INT 315	3
MIL 201 or Option	2	INT 353	3
SPE 395	3	MIL 202 or Option	2
	17		17

PRINTING TECHNOLOGY

Curriculum with a major in Printing Technology leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSC 172	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	Social Science Elective	3
GSP 180	1	INT 106	1
INT 105	1	INT 315	3
INT 191	3	INT 312	3
INT 311	3	MIL 102	2
MIL 101	2		
	17		16

Second Year

INT 205	3	General Elective	3
INT 216	5	Social Science Elective	3
INT 411	3	INT 201	3
MIL 201 or Option	2	INT 317	5
OAD 101	3	MIL 202 or Option	2
	16		16

INDUSTRIAL TECHNOLOGY (INT)

INT 105. Industrial Orientation I. **One hour.** I, II.
The evolution of American industry; contemporary industrial organization; wage systems; organized labor and labor-management relationships; impact of automation on industrial operations; current information regarding technical occupations; field trips to selected industrial firms.

INT 106. Industrial Orientation II. **One hour.** I, II.
A continuation of Industrial Technology 105 with emphasis placed on introductory topics related to plant layout, materials handling, methods improvement, motion and time study, work sampling techniques, work simplification, inspection and quality control, and production control; solution of selected problems; in-plant observation.

***INT 141.** (IED 141.) Elementary Woodwork. **Three hours.** I, II.
Basic instruction in the use of common hand tools; elementary machine operations; problems in wood construction; woodturning; related technical information; finishing and characteristics of common hard and soft woods.

***INT 180.** (IED 180.) General Metalwork I. **Three hours.** I, II.
Basic hand and machine operations and related information in sheet metal, bench metal, art metal, arc and oxyacetylene welding; projects and problems in each area of activity.

***INT 191.** (IED 191.) Technical Drawing I. **Three hours.** I, II.
Basic technical drawing involving sketching, lettering, orthographic projection, pictorial representation, drafting techniques, tracing and reproduction of drawings.

***INT 201.** (IED 201.) Applied Mathematics in Technology. **Three hours.** I, II.
Mathematics involving an intensive study of applied algebra, geometry, and trigonometry with emphasis on the application of mathematics in the solution of technical problems.

INT 205. Technical Illustration I. **Three hours.** A.
Prerequisite: INT 191 or consent of instructor.
Axonometric projection — isometric, dimetric and trimetric; oblique, pseudo representations and perspectives; commercial and technical illustration including airbrush, pencil rendering, ink delineations and other methods.

INT 216. Production Printing I. **Five hours.** A.
Basic printing experiences gained through work in the university print shop or in commercial printing establishments.

INT 220A. Practicum in Broadcast Operations. **Three hours.** A.
Supervised practical experiences in the operation of broadcast communication equipment; includes TV cameras and monitors, master switching panels, recording and projection devices; preparational procedures for FCC Licensing.

INT 220B. Practicum in Communication Equipment Maintenance. **Three hours.** A.
Supervised practical experiences in the maintenance of broadcast communication equipment; includes TV cameras and monitors, master switching panels, audio systems, recording and projection devices; continuation of preparational procedures for FCC Licensing.

INT 220C. Practicum in Instructional Media Materials. **Three hours.** A.
Supervised practical experiences in the design and preparation of instructional devices; includes slides, maps, charts, graphs, diagrams, models, dioramas, and transparencies; local production techniques and equipment.

INT 220D. Practicum in Instructional Media Equipment. **Three hours.** A.
Supervised practical experiences in the selection, installation and maintenance of instructional media equipment; preparation of bid specifications; minor repairs and preventive maintenance.

INT 225A. Internship in Broadcast Engineering. **Two or four hours.** A.
Coordinated and supervised work experience in broadcast engineering; arranged in approved University facilities or commercial establishments; credit varies with hours of employment: half-time, two hours; full-time, four hours.

INT 225B. Internship in Instructional Media. **Two or four hours.** A.

Coordinated and supervised work experience in instructional media design and fabrication; arranged in approved University facilities or commercial establishments; credit varies with hours of employment: half-time, two hours; full-time, four hours.

***INT 242.** (IED 242.) Intermediate Woodwork. Three hours. I, II.

Prerequisite: INT 141.

Advanced woodworking operations; instruction in the operation of woodworking machines; care and sharpening of tools; related technical information; construction and finishing of projects.

***INT 281.** (IED 281.) General Metalwork II. **Three hours.** I, II.

Basic hand tool and machine operations; foundry; forging; heat treating; machine shop projects and problems; related information in each area of activity.

***INT 283.** (IED 283.) Arc and Oxyacetylene Welding. **Three hours.** A.

Manipulative processes and related information basic to successful arc, oxyacetylene, and tungsten inert gas welding; metallurgy of welding; physical testing of weldments.

***INT 292.** (IED 292.) Technical Drawing II. **Three hours.** I, II.

Prerequisite: INT 191.

Preparation of detail and assembly drawings; production illustrations; screw threads and fasteners; shop processes; dimetric projections; secondary auxiliaries; reproduction processes and materials.

***INT 293.** (IED 293.) Technical Drawing III. **Three hours.** A.

Prerequisite: INT 191.

Advanced drafting techniques with special emphasis on map drafting and elementary surveying.

***INT 311.** (IED 311.) Graphic Arts I. **Three hours.** I, II.

General graphic arts with emphasis on hand composition, elementary presswork, silkscreen principles, linoleum block printing, and bookbinding.

***INT 312.** (IED 312.) Graphic Arts II. **Three hours.** I, II.

Prerequisite: INT 311.

Advanced graphic arts with emphasis on automatic machine printing; production techniques; photography; and offset lithography.

***INT 315.** (IED 315.) (Formerly INT 512.) Photography I. **Three hours.** A.

Picture composition, film developing, printing, enlarging, dodging, contact printing, photo finishing, study of and care for equipment and materials; visual instruction; planning of facilities. (Each student required to provide camera.)

INT 317. Production Printing II. **Five hours.** A.

Prerequisite: INT 312.

Advanced printing experiences acquired through work in the university print shop or in commercial printing establishments.

***INT 351.** (IED 351.) Fundamentals of Applied Electricity. **Three hours.** I, II.

Principles of static and current electricity; measures of electricity; heat, light, and power applied to the planning and construction of electrical installations.

***INT 352.** (IED 352.) Electrical Power and Motor Repair. **Three hours.** A.

Prerequisite: INT 351.

Generation and distribution of electricity; power distribution systems; maintenance and repair of electrical power.

***INT 353.** (IED 353.) (Formerly called Introduction to Radio and Electronics) Introduction to Electronics. **Three hours.** I, II.

Prerequisite: INT 351.

Fundamentals of vacuum tubes; semiconductor devices; AM radio receivers and servicing techniques.

***INT 372.** (IED 372.) Power Mechanics I. **Three hours.** I, II.

Prerequisite: INT 351 or consent of instructor.

Principles of power sources and basic mechanisms; disassembly, inspection, measurement, adjustment, and tune-up of the two and four-cycle small gasoline engine.

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*Credit is to be granted for only one of these cross-listed courses.

*INT 373. (IED 373.) Power Mechanics II. **Three hours.** I, II.
Prerequisite: INT 372.
Study of the multi-cylinder engine; fuels and fuel systems; lubrication, cooling, ignition, tests, tune-up, adjustment and minor repair.

*INT 382. (IED 382.) Machine Shop Practice I. **Three hours.** A.
Prerequisite: INT 281.
Projects and problems involving machine operations on the lathe; bench work; blueprint reading; precision measurement; related technical information.

*INT 394. (IED 394.) (Formerly called Elementary Architectural Drawing) Architectural Drawing I. **Three hours.** I, II.
Prerequisite: INT 191.
Basic principles of house planning; styles of home architecture; comparative study of building materials; the preparation of a complete set of plans and specifications for a small home.

*INT 395. (IED 395.) Descriptive Geometry. **Three hours.** A.
Prerequisite: INT 191 or consent of instructor.
Application of the theory of orthographic projection to the graphical representation and solution of three-dimensional problems.

*INT 411. (IED 411.) Graphic Arts III. **Three hours.** A.
Prerequisite: INT 312.
Advanced photography; offset lithography; graphic arts materials and processes; printing management; current trends in the graphic arts industry.

*INT 451. (IED 451.) Industrial Electronics I. **Three hours.** I.
Prerequisite: INT 353.
Principles of timing, control circuitry, transducers, polyphase systems, and gaseous tubes as applied to industrial and commercial installations.

*INT 452. (IED 452.) Industrial Electronics II. **Three hours.** II.
Prerequisite: INT 451.
Applications of industrial control circuitry; generation of electricity; power distribution systems; maintenance and repair of electrical devices.

*INT 454. (IED 454.) (Formerly called Advanced Radio and Electronics I) Communications Electronics I. **Three hours.** I.
Prerequisite: INT 353.
Advanced radio communication receiving principles; quality audio reproducing devices; transmitter procedures; transmitting antennas; communications systems and electronics servicing techniques.

*INT 455. (IED 455.) (Formerly called Principles of Television.) Communications Electronics II. **Three hours.** II.
Prerequisite: INT 454.
Principles of television; antenna theory and installation; closed circuit television operation; television servicing techniques.

*INT 471. (IED 471.) Power Transmission. **Three hours.** A.
Prerequisite: INT 373.
Principles of mechanical, electrical and fluid power transmission. Disassembly, inspection, and adjustment of mechanical transmission units; construction of fluid power circuits emphasizing their application to modern machines.

*INT 472. (IED 472.) Chassis and Electrical Systems. **Three hours.** A.
Prerequisite: INT 373.
Detailed study and application of starting, charging, lighting, and accessory circuits; suspension, brakes, power brakes, steering, power steering, air conditioning.

*INT 487. (IED 487) Machine Tool Processes II. **Three hours.** A.
Prerequisite: INT 382.
Continuation of Industrial Technology 382 with increased emphasis on machine tool operations; gear cutting; tool and cutter grinding; problems in tool making; related technical information.

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*Credit is to be granted for only one of these cross-listed courses.

*INT 488. (IED 488.) Machine Tool Processes III. **Three hours.** A.

Prerequisite: INT 487.

Advanced machine tool operations and tool making; heat treating of metals; related technical studies and metrology.

*INT 489. (IED 489.) Characteristics and Maintenance of Machine Tools. **Two hours.** A.

Prerequisite: INT 487.

Machine design and construction; installing, servicing, powering and rebuilding machine tools.

*INT 492. (IED 492.) Technical Drawing IV. **Three hours.** I.

Prerequisite: INT 292.

Advanced machine drafting dealing with detail and assembly drawing, patent drawing, production illustrations, and tool design.

*INT 496. (IED 496.) (Formerly called Advanced Architectural Drawing) Architectural Drawing II. **Three hours.** II.

Prerequisite: INT 394.

Preparation of complete plans and specifications for small commercial and large residential buildings; emphasis on modern methods and materials utilized in the building industry; illustrative rendering; structural modeling.

*INT 501. (IED 501) Special Problems in Industrial Technology. **Three hours.** I, II.

A course for graduates and exceptional undergraduates involving independent study and research related to problems of a theoretical and/or practical nature.

*INT 502. (IED 502) Industrial Materials and Processes. **Three hours.** A.

Characteristics, utilization and processing of industrial materials such as wood, metals, plastics, clay, glass, concrete, etc.; composition and working qualities; types, grades, availability, and suitability of materials for varying purposes; shaping, forming, cutting, and finishing processes; quality, prices and control of materials and products.

*INT 511. (IED 511.) Advanced Technical Problems in Graphic Arts. **Two-Six hours.** I, II.

Technical instruction in the graphic arts field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in graphic arts.

*INT 533. (IED 533). Workshop in Industrial Technology. **Four hours.** A.

533b Graphic Arts; 533c Plastics; 533d Power Mechanics; 533e Electronics; 533g Metals.

*INT 541. (IED 541.) Advanced Technical Problems in Woodworking. **Two-Six hours.** I, II.

Technical instruction in the woodworking field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in woodworking.

*INT 551. (IED 551.) Advanced Technical Problems in Electricity-Electronics. **Two-Six hours.** I, II.

Technical instruction in the electricity-electronics field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in electricity-electronics.

*INT 561. (IED 561.) Evaluation in Technical Education. **Three hours.** A.

Methods of evaluation in technical education; elementary statistical procedures; preparation and use of measuring devices; assessing technical competency, creativeness, quality, and quantity; analysis and interpretation of test results.

*INT 571. (IED 571.) Advanced Technical Problems in Power Mechanics. **Two-Six hours.** I, II.

Technical instruction in the power mechanics field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in power mechanics.

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*Credit is to be granted for only one of these cross-listed courses.

***INT 581.** (IED 581.) Advanced Technical Problems in Metalworking. **Two-Six hours.** I, II.

Technical instruction in the metalworking field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in metalworking.

***INT 591.** (IED 591.) Advanced Technical Problems in Drafting. **Two-Six hours.** I, II.

Technical instruction in the drafting field. Recent developments, advanced technical and experimental problems, and preparation of technical reports in drafting.

GRADUATE COURSES

***INT 611A.** (IED 611A.) Advancd Technical Study in Printing Technology: Photography. **Three hours.** A.

Advanced technical study, research and experimentation in photography; cameras and lenses, filters, films, enlarging, dodging, and finishing; color photography; darkroom techniques.

***INT 611B.** (IED 611B.) Advanced Technical Study in Printing Technology: Layout and Design. **Three hours.** A.

Advanced technical study, research and experimentation in layout and design; concepts of graphic design related to newspapers, books, brochures, flyers, and posters; practical experience in design and layout of graphic presentations.

***INT 611C.** (IED 611C.) Advanced Technical Study in Printing Technology: Color Separation. **Three hours.** A.

Advanced technical study, research and experimentation in color separation; copy preparation, camera techniques, developing, stripping, platemaking, and press operations.

***INT 611D.** (IED 611D.) Advanced Technical Study in Printing Technology: Photo-Offset-Lithography. **Three hours.** A.

Advanced technical study, research and experimentation in photo-offset-lithography; inks, fountain solutions, films, chemicals, type methods, layout, stripping, camera techniques, and platemaking.

***INT 611E.** (IED 611E.) Advanced Technical Study in Printing Technology: Quality Control. **Three hours.** A.

Advanced technical study, research and experimentation in printing quality control; plant layout, temperature, humidity, chemicals, papers, and photographic materials.

***INT 633.** (IED 633.) Creative Problem Solving in Technical Fields. **Three hours.** A.

A review and analysis of basic and applied research in the development of creative behavior with emphasis on its application to industrial teaching and industrial problem solving.

***INT 641A.** (IED 641A.) Advanced Technical Study in Wood Technology: Structure and Characteristics. **Three hours.** A.

Advanced technical study, research and experimentation in structure and characteristics of wood; species, chemical composition, botanical structure, physical characteristics, and identification techniques.

***INT 641B.** (IED 641B.) Advanced Technical Study in Wood Technology: Dimensional Stability. **Three hours.** A.

Advanced technical study, research and experimentation in dimensional stability of wood; moisture content effects and control, strength and density, seasoning, and drying defects.

***INT 641C.** (IED 641C.) Advanced Technical Study in Wood Technology: Veneer and Plywood Production. **Three hours.** A.

Advanced technical study, research and experimentation in veneer and plywood production; veneer production and specifications; strength characteristics, specifications, grades, and uses of hardwood and softwood plywood; grading and production processes.

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*Credit is to be granted for only one of these cross-listed courses.

*INT 641D. (IED 641D.) Advanced Technical Study in Wood Technology: Wood Substitutes. **Three hours.** A.

Advanced technical study, research and experimentation in wood substitutes: composition and characteristics of hardboard, particle board and plastic laminates; material specifications; principles of application to industrial use.

*INT 641E. (IED 641E.) Advanced Technical Study in Wood Technology: Adhesives. **Three hours.** A.

Advanced technical study, research and experimentation in wood adhesives; types, characteristics and application techniques of naturfal and synthetic adhesives; joinery and control factors; curing and comparative testing.

*INT 651A. (IED 651A.) Advanced Technical Study in Electricity/Electronics Technology: Solid State Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in solid state electronics; amplifying devices; solid state and integrated circuit analysis and design.

*INT 651B. (IED 651B.) Advanced Technical Study in Electricity/Electronics: Computer Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in computer electronics; digital systems, logic, component functions, memory systems, and control circuitry.

*INT 651C. (IED 651C.) Advanced Technical Study in Electricity/Electronics: Communicative Systems. **Three hours.** A.

Advanced technical study, research and experimentation in electronic communicative systems; signal analysis, transmission and modulation; intelligence and navigational transmission and reception; trouble shooting analysis and procedures.

*INT 651D. (IED 651D.) Advanced Technical Study in Electricity/Electronics: Microwave Electronics. **Three hours.** A.

Advanced technical study, research and experimentation in microwave electronics; field phenomena; equipment components and characteristics; measurement techniques; communication systems.

*INT 651E. (IED 651E.) Advanced Technical Study in Electricity/Electronics: Instrumentation. **Three hours.** A.

Advanced technical study, research and experimentation in instrumentation; measurement concepts; industrial considerations; electrical and electronic instruments and applications; control and regulation systems.

INT 665. Thesis I. **Three hours.** A.

INT 666. Thesis II. **Three hours.** A.

INT 667. Research in Industrial Technology. **Three hours.** A. (May be repeated for a maximum of six hours.)

Individual investigations in the field of industrial technology. Investigations may be conducted in the field or laboratory and under the supervision of the research advisor and other staff members.

*INT 681A. (IED 681A.) Advanced Technical Study in Metals Technology: Industrial Metrology. **Three hours.** A.

Advanced technical study, research and experimentation in industrial metrology; precision measurement equipment and techniques; high amplification pneumatic, electronic, mechanical, and optical comparators; interferometry, radiography and monochromatic light techniques.

*INT 681B. (IED 681B.) Advanced Technical Study in Metals Technology: Tool Design. **Three hours.** A.

Advanced technical study, research and experimentation in tool design; design and fabrication of tooling jigs, fixtures and dies; modern metal forming production techniques; efficiency in machine utilization; heat treatment of metallic substances.

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*Credit is to be granted for only one of these cross-listed courses.

***INT 681C.** (IED 681C.) Advanced Technical Study in Metals Technology: Materials Testing. **Three hours.** A.

Advanced technical study, research and experimentation in materials testing; non-destructive tests including Zyglo, Magniglo, dye penetrant, magniflux, X-ray, ultrasonic, nucleonic, and radiographic; destructive tests including tensile strength, compression, shear, torsion, and impact resistance; specimen preparation.

***INT 681D.** (IED 681D.) Advanced Technical Study in Metals Technology: Mechanical Power Transmission. **Three hours.** A.

Advanced technical study, research and experimentation in mechanical power transmission devices; properties and design application of the involute curve; gear types; spherical and planetary application systems; design and fabrication of power transmission devices.

***INT 681E.** (IED 681E.) Advanced Technical Study in Metals Technology: Assembly Processes. **Three hours.** A.

Advanced technical study, research and experimentation in metals assembly processes; adhesive bonding and seals; mechanical fasteners and components; brazing, soldering and welding techniques; pneumatic and hydraulic assembly applications.

***INT 691A.** (IED 691A.) Advanced Technical Study in Drafting Technology: Theory of Projection I. **Three hours.** A.

Advanced technical study, research and experimentation in drafting projection theory; Mongean method and adaptations; positional change and theorems; force systems; Bow's notation; Pappus and Guldinus Theorem; four-dimensional descriptive geometry.

***INT 691B.** (IED 691B.) Advanced Technical Study in Drafting Technology: Theory of Projection II. **Three hours.** A.

Continuation of INT 691A; axonometric, oblique, perspective, and stereographic projection; shades and shadows applied to pictorial representations.

***INT 691C.** (IED 691C.) Advanced Technical Study in Drafting Technology: Advanced Illustration. **Three hours.** A.

Advanced technical study, research and experimentation in industrial illustration; media; pencil, ink, Zip-a-tone, scratchboard, double and triple-tone board, coquille board, intaglio, airbrush, and planographic impression techniques; photo retouching; problems analysis; preparation of presentations.

***INT 691D.** (IED 691D.) Advanced Technical Study in Drafting Technology: Drafting Reproduction Processes. **Three hours.** A.

Advanced technical study, research and experimentation in drafting reproduction processes; exposure and development systems; dry and moist diazo, blueprint, Van Dyke, azograph, offset, microfilm, photostat and reflex processes.

***INT 691E.** (IED 691E.) Advanced Technical Study in Drafting Technology: Drafting Standards. **Three hours.** A.

Advanced technical study, research and experimentation in drafting standards; study and comparison of ASA, military, SAE, AWS, and selected industrial standards; influences affecting standards; preparation of standards for a manufacturing or architectural establishment.

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*Credit is to be granted for only one of these cross-listed courses.

THE KENTUCKY SCHOOL OF CRAFTS (KYC)

K. Hansson, Coordinator

The Kentucky School of Crafts began offering courses with the beginning of the 1966-67 academic year. The dominant objective of the Kentucky School of Crafts is to provide vocational-technical training in the crafts. Opportunities are provided for novice craftsmen to gain knowledge and skill and for practicing craftsmen to upgrade themselves in their particular craft.

Students who complete the two-year course of study are prepared, with entry level skills, for work in production shops, as self-employed craftsmen, or skilled workers and technicians in related industries. The in-service program for teachers has as its purpose the upgrading of teachers and craft programs in schools and communities.

KENTUCKY SCHOOL OF CRAFTS (KYC)
WOODCRAFT

Curriculum with a major in Woodcraft leading to an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSS 144	3	GSP 181	1
GSP 180	1	IED 191	3
KYC 120	3	KYC 150	3
ART 100	3	KYC 162	3
KYC 161	3	ART 200	3
MIL 101 (Men) or elective (women)	2	MIL 102 (men) or elective (women)	2
	18		18

Second Year

GSC 161	3	KYC 262	3
ART 117	3	KYC 280	3-6
IED 292	3	OAD 101	3
KYC 261	3	MIL 202 or option	2
MIL 201 or option	2	Elective*	3-6
Elective*	3		
	17		17

*Elective in Art, Industrial Education, or Kentucky School of Crafts.

KENTUCKY SCHOOL OF CRAFTS (KYC)

KYC 120. Introduction to Craft Techniques. **Three hours.** A.
Survey of the history of craft; relationship between the crafts and the major arts; crafts in contemporary society; craft as a vocation and an avocation; kinds of crafts; media and techniques in craft work; the craft market.

KYC 150. Designing for the Crafts. **Three hours.** A.
Design and techniques of designing in the crafts; application of the principles of design related to various media; experimentation and problem solving in developing design solution; designing for production.

KYC 161. Woodworking, Woodcrafts, Materials and Processes. I. **Three hours.** A.
Introduction to woodcrafts; function, care and use of hand and machine woodworking tools; kinds, qualities, and sources of wood; basic experiences with three-dimensional woodcraft; fundamental techniques of wood fabrication including carving, turning, joinery, and finishing.

KYC 162. Woodworking, Woodcrafts, Materials and Processes. II. **Three hours.** A.
Prerequisite: KYC 161.
A continuation of Woodworking, Woodcrafts, Materials, and Processes I; advanced techniques of wood fabrication; introduction to new materials, methods, and techniques in woodcrafts; design of craft articles.

KYC 261. Woodworking, Woodcrafts, Materials and Processes. III. **Three hours.** A. Prerequisite: KYC 162.
Design, layout, and construction of furniture and craft items; veneering, laminating, and finishing; production methods and techniques; use of jigs, fixtures, and templates; analysis of design and production problems.

KYC 262. Woodworking, Woodcrafts, Materials and Processes. IV. **Three hours.** A. Prerequisite: KYC 261.
Advanced design, layout, and construction of furniture and craft items; advanced finishing; techniques of veneering, laminating, and finishing; production methods and techniques; equipping, operating, and layout of the small shop; utilization of tools and machinery.

KYC 280. Special Problems in Woodcrafts. **Three-six hours.** A.
Student will design and fabricate, with the approval of the instructor, one or more craft items to be submitted to a board for evaluation.

KYC 290. Woodcraft. **One hour.** A.
Introduction to woodcraft; characteristics and uses of various hard and soft woods; basic experiences with three-dimensional crafts including carving, finishing, and designing.

KYC 291. Metalcraft. **One hour.** A.
Introduction to metalcraft; techniques of designing; layout, raising, planishing, chasing, etching, soldering, and enameling.

KYC 292. Leathercraft. **One hour.** A.
Introduction to leathercraft; designing in leather; basic experiences in leather work—cutting, tooling, embossing, carving, lacing, dyeing, coloring, and braiding.

KYC 500. Special Problems and Field Study. **Three hours.** A.
A course for teachers in crafts and related fields; problems and issues in vocational and avocational crafts are studied; planning of crafts programs for the community based on a study of the school, facilities, community, the people, and the teacher's interest and ability.

LAW ENFORCEMENT (LEN)

R. W. Posey, Director; Black, Byrd, Deese, Moody, Scott, Snarr. Lecturers: Boucher, Chenault, Easterling, Kelley, McGinnis.

The responsibility of the School of Law Enforcement is to prepare students for careers in police work. The curricula present subjects in organization, supervision, operations, and techniques. Enforcement, utilizing both repressive and preventative approaches, as well as investigative techniques with laboratory participation is treated. The student may expect to acquire a foundation in police history, philosophy, and trends.

The curricula provide areas of concentration at the Associate of Arts Degree level in: Law Enforcement, Juvenile, Corrections and Industrial Security. The Bachelor of Science Degree is also offered in Law Enforcement.

Students completing this program should expect employment in state police organizations, federal law enforcement agencies, county police agencies, city police agencies, various investigative agencies, corrections and social work.

Students will be fully admitted to the Department of Law Enforcement only after a determination of good character has been made. A thorough check will be made of each student's background during the first semester in which the student enrolls for Law Enforcement courses.

A student may minor in Law Enforcement by taking a minimum of 18 semester hours. He must take LEN 101, LEN 205, LEN 304 and LEN 314. Nine hours must be in upper division courses.

A student who is not proficient in typing will be required to enroll in OAD 151 to remove this deficiency.

LAW ENFORCEMENT—GENERAL

Curriculum with a major in Law Enforcement leading to the Bachelor of Science Degree. The first two years of this curriculum may be found in the Central University College section of the catalogue.

Third Year

First Semester	Hours	Second Semester	Hours
**LEN Elect.	3	LEN 303	3
LEN 301	3	LEN 304	3
LEN 302	3	*Minor Subject	3
*Minor Subject	3	PSY 308	3
PSY 211	3	SOC 231	3
	15		15

Fourth Year

ART 390	3	ART 391	3
LEN 305	3	Gen. Elec.	2
LEN 306	3	LEN 307	1
Minor Subject	6	**LEN Elect.	3
		*Minor Subject	3
		POL 362	3
	15		15

*Minors are recommended in the fields of business, psychology, sociology, or political science. The minor field should be selected in consultation with the Director of the School of Law Enforcement. The courses comprising the minor field (18 semester hours) will be selected with the approval of the Director of the School of Law Enforcement and the department head in the minor field.

**Law Enforcement electives selected with approval of the Director of the School of Law Enforcement. Other electives must be approved by the Director of the School of Law Enforcement and should be selected from courses offered by the Department of Anthropology and Sociology.

LAW ENFORCEMENT—GENERAL

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
OAD 151	2	GSC 162 or 172	3
GSC 171	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	LEN 102	3
GSP 180	1	LEN 203	3
HEA 202	2	LEN 205	3
LEN 101	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

LEN 301	3	LEN 304	3
LEN 302	3	LEN 305	3
LEN 303	3	LEN 306	3
MIL 201 or option	2	LEN 307	1
POL 101	3	MIL 202 or option	2
PSY 211	3	POL 362	3
		SOC 231	3
	17		18

LAW ENFORCEMENT—INDUSTRIAL SECURITY

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
OAD 151	2	GSC 162 or 172	3
GSC 171	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	LEN 102	3
GSP 180	1	LEN 203	3
HEA 202	2	LEN 205	3
LEN 101	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

LEN 301	3	LEN 304	3
LEN 302	3	LEN 306	3
LEN 312	3	LEN 307	1
MIL 201 or option	2	LEN 313	3
POL 101	3	MIL 202 or option	2
PSY 211	3	POL 362	3
		SOC 231	3
	17		18

LAW ENFORCEMENT—CORRECTIONS

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
OAD 151	2	GSC 162 or 172	3
GSC 171	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	LEN 102	3
GSP 180	1	LEN 204	3
HEA 202	2	LEN 205	3
LEN 101	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

LEN 301	3	LEN 304	3
LEN 303	3	LEN 306	3
LEN 308	3	LEN 307	1
MIL 201 or option	2	LEN 309	3
POL 101	3	MIL 202 or option	2
PSY 211	3	POL 362	3
		SOC 231	3
	17		18

LAW ENFORCEMENT—JUVENILE

Curriculum for an Associate of Arts Degree

First Year

First Semester	Hours	Second Semester	Hours
OAD 151	2	GSC 162 or 172	3
GSC 171	3	GSE 102	3
GSE 101	3	GSP 181	1
GSO 100	1	LEN 102	3
GSP 180	1	LEN 203	3
HEA 202	2	LEN 205	3
LEN 101	3	MIL 102	2
MIL 101	2		
	17		18

Second Year

LEN 301	3	LEN 304	3
LEN 303	3	LEN 306	3
LEN 310	3	LEN 307	1
MIL 201 or option	2	LEN 311	3
POL 101	3	MIL 202 or option	2
PSY 211	3	POL 362	3
		SOC 231	3
	17		18

LAW ENFORCEMENT (LEN)

LEN 101. Introduction to Law Enforcement. **Three hours.** A.
An introduction to the philosophical and historical background; agencies and processes; purposes and functions. An evaluation of law enforcement today; current trends; career orientation.

LEN 102. Police Systems. **Three hours.** A.
Police Systems established in America and abroad: functions and activities, divisions and subdivisions with responsibilities and functions of each. Contrasting of structures, with a view of transitions.

LEN 203. Police Patrol and Services. **Three hours.** A.
Organization, administration and supervision of patrol function. Responsibilities, techniques and methods of police and patrol. Various services and public assistance offered by police organizations.

LEN 204. Introduction to Penology. **Three hours.** A.
A survey of philosophy and history of corrections; a study of correctional institution; probation, parole, and processes involving corrections; a survey of career opportunities.

LEN 205. Police Administration I. **Three hours.** A.
An examination of the principles of organization, administration and functions of police departments. An evaluation of personnel policies, divisions, operations, command policies, and evaluation of the department as a whole.

LEN 301. Introduction to Criminalistics. **Three hours.** A.
A course designed to give the student a basic knowledge of crime scene protection, collection, preservation and identification of evidence, including proper search, dusting latent print, casting, finger print classification, and use of crime laboratory and crime detection and prosecution.

LEN 302. Motor Vehicle Codes and Traffic Records. **Three hours.** A.
A study of the development and need for traffic laws with primary attention focused upon the Uniform Motor Vehicle Code and Model Traffic Ordinances including use and implementation. The maintenance and preparation of an adequate records system relative to traffic safety is examined.

LEN 303. Court Procedures and Mechanics. **Three hours.** A.
Case preparation; officer demeanor in court; effective presentation of evidence; trial procedure; use of written notes; officer appearance; and reaction of cross examination.

LEN 304. Criminal Investigation. **Three hours.** A.
Fundamentals of criminal investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, follow-up and case preparation.

LEN 305. Police Administration II. **Three hours.** A.
Prerequisite: LEN 205.
A detailed study of the organization, administration and function of the police department. The designing of policies; a study of the arrangement within a department of specific operations and commands.

LEN 306. Seminar in Law Enforcement. **Three hours.** A.
Reviews and synthesis of basic principles, practices, and procedures. Visitation to operating police organization. Final preparation for employment in law enforcement.

LEN 307. Firearms. **One hour.** A.
This course includes the moral aspects, legal provisions, safety precautions, restrictions covering the use of firearms, nomenclature, and the firing of the sidearm and shotgun.

LEN 308. Probation and Parole. **Three hours.** A.
A history and philosophy of probation and parole; function and operation of parole board; statutory authorization and limitation; modern trends; personnel qualifications.

LEN 309. Prison Security and Administration. **Three hours.** A.
Selection and training of guard force; dispersement of guard personnel; design and arrangement of physical detention barriers; separation of prisoner personnel; dealing with illegal traffic within the prison; scheduling activities and labor details; prison policies and procedures.

LEN 310. The Juvenile and Police. **Three hours.** A.
The development of delinquent and criminal behavior; initial handling and proper referrals; preventive police techniques; special police problems with juveniles; juvenile laws; agencies concerned.

LEN 311. Juvenile Procedures. **Three hours.** A.
A course in organization, function, and jurisdiction of juvenile agencies; the processing and detention of juveniles; case disposition; and juvenile statutes and court procedures.

LEN 312. Business and Industrial Security. **Three hours.** A.
Selection, training and staffing of security force; security devices available; techniques of internal security; ground security; security techniques applicable to personnel selection; legal problems; employment opportunities.

LEN 313. The Prevention of Fire and Accidents. **Three hours.** A.
Fire and accident prevention, organization and functioning; recognition and solution of hazards; regulations and enforcement; common and special problems.

LEN 314. Criminal Law. **Three hours.** A.
The structure, definitions, and interpretations of the most frequently used sections of the penal code and other criminal statutes.

LEN 320. Workshop in Law Enforcement. **One to three hours.** A.
The workshop is designed primarily for in-service law enforcement personnel and will focus on current problems, issues, and strategies in providing effective enforcement. Students may enroll for a maximum of six semester hours credit in: 320a, Corrections; 320b, Industrial Security; 320c, Juvenile Offenders; and 320d, General Law Enforcement.

GRADUATE COURSES IN CRIMINAL JUSTICE

CRJ 540. Special Problems in Criminal Law. **Three hours.** A.
An advanced study of theories in criminal law and criminal procedure; the relationship of criminal law to the prevention of criminal behavior and to rehabilitation; techniques of legal research.

CRJ 610. Advanced Police Administration. **Three hours.** A.
An examination of the functions of the police in the system of criminal justice; principles of organization, administration, police formulation, and management of personnel; statutory limitations on authority and jurisdiction; professionalization of the police.

CRJ 620. Seminar in Juvenile Delinquency. **Three hours.** A.
Theoretical and empirical study of the etiology, distribution, and extent of delinquency; problems involved in measuring delinquency; role of the police and courts; legal statutes; critical examination of treatment and prevention programs.

CRJ 630. Seminar in Criminology and Corrections. **Three hours.** A.
A seminar designed to explore current criminological theories and practices regarding causes of criminal behavior; contemporary philosophies, legal codes, and methods of treating offenders; the social structure of the institution; measures for the prevention of crime.

CRJ 611. Applied Study in Law Enforcement. **Three hours.** A.
Supervised study in an approved law enforcement setting designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 621. Applied Study in Juvenile Delinquency. **Three hours. A.**
Supervised study in an approved agency dealing with juvenile delinquents designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 631. Applied Study in Corrections. **Three hours. A.**
Supervised study in an approved correctional setting designed to provide the student an opportunity to synthesize theory and on-the-job situations. Individual conferences.

CRJ 697. Research in Criminal Justice. **Three or Six hours. A.**
Individual investigations in the field of criminal justice. Investigations may be conducted in the field and under the supervision of the research advisor and other staff members.

CRJ 698. Thesis I. **Three hours. A.**

CRJ 699. Thesis II. **Three hours. A.**

NURSING (NUR)

C. Denny, Chairman; Berge, Jackson, Pettengill, Wisenbaker.

The Associate of Arts Degree Program in Nursing combines general education and nursing education in a two year collegiate environment. Graduates of this program who pass the state licensing examination are licensed to practice as Registered Nurses.

Students who do not present at least a "C" average in any nursing course will be required to repeat that course.

Curriculum with a major in Nursing leading to an Associate of Arts Degree.**

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
GSO 100	1	CHE 104	4
BIO 171	4	GSP 181	1
GSP 180	1	NUR 103	4
NUR 101	5	NUR 104	4
NUR 102	3	NFA 201	2
	17		18

Second Year

BIO 273	4	NUR 203	4
NUR 201	4	NUR 204	4
NUR 202	4	NUR 205	2
*Electives	6	*Electives	6
	18		16

*Restrictive electives to be selected (1) one course from each of two of the following areas: Psychology, Anthropology, Sociology, or GSS 142; and (2) two courses selected from English Literature, Drama, Humanities, Art Appreciation and/or Music Appreciation.

**Men students must enroll in Military Science each semester unless they have prior active service.

NURSING (NUR)

NUR 101. Nursing Fundamentals. **Five hours. I.**

Scientific principles underlying nursing care; development of basic skills used in providing patient care; selected clinical experiences required.

NUR 102. Interpersonal Relationships in Nursing. **Three hours. I.**

Principles related to nursing diagnosis and their implications in providing patient care.

NUR 103. Nursing Care of Mothers and Newborns. **Four hours. II.**

Scientific principles used in providing nursing care to mothers and newborns; development of skills used in providing this care; selected clinical experiences required.

NUR 104. Medical—Surgical Nursing I. **Four hours. II.**

Concepts underlying physical and emotional responses to illness; development of general nursing skills applicable to the care of all medical-surgical patients; selected clinical experiences required.

NUR 201. Nursing Care of Children. **Four hours. I.**

Scientific principles used in providing nursing care to children; development of skills used in providing this care; selected clinical experiences required.

NUR 202. Medical—Surgical Nursing II. **Four hours. I.**

Physical disorders of patients and appropriate nursing interventions; selected clinical experiences required.

NUR 203. Psychiatric Nursing. **Four hours. II.**

Concepts and skills needed to interact therapeutically with individuals with emotional problems; selected clinical experiences required.

NUR 204. Medical—Surgical Nursing III. **Four hours. II.**

Continuation of Medical—Surgical Nursing II; emphasis on more complex physical disorders; selected clinical experiences required.

NUR 205. Seminar in Nursing. **Two hours. II.**

Problems in nursing; role of the nurse in working toward their solution.

NUR 220. Medical Terminology. **Three hours. I.**

Emphasis on building vocabulary essential to students in premedical, predental, preveterinary medicine, nursing and other health or science curricula. Includes prefixes, suffixes, roots, abbreviations, diseases, operative and drug terms.

MEDICAL RECORD TECHNOLOGY (MRS)

Curriculum with a major in Medical Record Technology leading to an Associate of Arts Degree.**

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	GSE 102	3
CHE 104	4	BIO 171	4
GSO 100	1	GSP 181	1
GSP 180	1	SPE 100	3
OAD 152	2	MRS 111	5
NUR 220	3		
MRS 110	3		
	17		16

Second Year

MRS 210	5	MRS 212	5
MRS 211	3	EDP 313	3
MAT 107	3	GSP 281	3
Social Science Elective	3	Social Science Elective	3
Elective	3	Elective	3
	17		17

**Men students must enroll in Military Science each semester unless they have prior active service.

MEDICAL RECORDS (MRS)

MRS 110. Medical Record Science I. **Three hours.** I.
History, value, uses and legal aspects of medical records with emphasis on basic skills used by medical record technicians.

MRS 111. Medical Record Science II. **Five hours.** II.
Pererequisite: MRS 110.
Principles, maintenance and control of the unit medical record with emphasis on record management and machine transcription. Clinical practice required.

MRS 210. Medical Record Science III. **Five hours.** I.
Prerequisite: MRS 111.
A continuation of MRS 111 with emphasis on collecting data for statistical purposes, preparing reports, uses of indexes, and coding of diseases (SNDO and ICDA). Clinical practice required.

MRS 211. Organization and Administration of Medical Records. **Three hours.** I.
Principles and practice essential to efficient operation of a medical records department.

MRS 212. Medical Record Science IV. **Five hours.** II.
Prerequisite: MRS 210.
Emphasis on assembling and checking records, reports, correspondence, including legal and ethical aspects of medical records. Clinical practice required.

TRAFFIC SAFETY INSTITUTE

L. Leach, Director; J. Miller, C. Shipley.

The Traffic Safety Institute was established in 1966 to provide instruction, research, and public service in the broad area of traffic safety. Students wishing to teach driver education in the secondary schools of Kentucky, may meet the certification requirements by taking courses offered within the Traffic Safety Institute.

Additional information regarding the Institute may be obtained by writing the Director of the Traffic Safety Institute, Eastern Kentucky University, Richmond, Kentucky 40475.

*TRS 585. Teacher Preparation in Driver Education. **Three hours.** I, II.
Analysis of traffic accidents, attitude factors, essential knowledge of automobile operation, and traffic laws and regulations. Includes introduction to laboratory experiences; use of psycho-physical testing and development of driving proficiency.

*TRS 586. Administration and Supervision of Driver Education. **Three hours.** II.
Preparation for secondary school instruction. Problems of organization and administration of driver education on the secondary level. Emphasis on scheduling, public relations, competence in transferring knowledge and skills, and satisfactory attitudes in students.

*TRS 585 and 586 are limited to students pursuing a teacher education program except with the permission of the dean of the college in which the student has his major.

College of Arts and Sciences

Pre Curricula . 172
Anthropology and Sociology . 176
Art . 183
Biology . 186
Chemistry . 196
Drama and Speech . 200
English . 204
Foreign Languages . 211
Geography . 219
Geology . 225
History . 230
Mathematics . 238
Music . 243
Philosophy . 253
Physics . 255
Political Science . 260
Psychology . 266

A & S

COLLEGE OF ARTS AND SCIENCES

Frederic D. Ogden, Dean

Glenn O. Carey, Associate Dean

The role of the College of Arts and Sciences is to provide a basic liberal education for the student and to help him prepare for life in the cultural setting in which he will practice his vocation or profession. A liberal education is designed to free and enlarge the mind and spirit of man, to liberate him from the meanness and meagerness of mere existence, and to enable him to choose in freedom his values and goals. The College offers opportunities for this kind of education not only to its own students but also the students of all divisions of the University. It cooperates with Central University College in providing courses in general education; with the Colleges of Applied Arts and Technology, Business, and Education in providing upper level courses; and with the Graduate School in providing graduate programs and graduate courses.

To fulfill its role, the College offers instruction and conducts research in anthropology, art, biology, broadcasting, chemistry, drama, earth science, English, fisheries management, foreign languages, geography, geology, history, journalism, mathematics, music, philosophy, physics, political science, psychology, regional planning, sociology, social work, speech and wildlife management. Economics may also be studied.

Another important function of the College is to offer courses which are intended to prepare the student for later study of professional courses. Specific preprofessional programs are offered which are designed to prepare the student to qualify for admission to schools of medicine and dentistry. A three-year medical technology curriculum, with the fourth year to be taken in an accredited hospital, is provided. Courses are offered which are designed to prepare the student for further work in dental hygiene, engineering, forestry, law, optometry, pharmacy and veterinary medicine.

Admission

Students are admitted to the College at the beginning of the junior year. Those students pursuing courses of study offered by departments in the College will be registered in it. Students seeking certification to teach at the secondary level will be registered in the College of Arts and Sciences if their majors are in the College. To be admitted, students must have completed a minimum of sixty-four semester hours with a grade point average of 1.8 or higher.

Degrees Offered

The College of Arts and Sciences offers curricula leading to the degrees of Bachelor of Arts, Bachelor of Science, Bachelor of Music Education, and Bachelor of Music. The Bachelor of Arts degree is conferred upon students who major in anthropology, art, broadcasting, drama, economics, English, French, geography, German, history, journalism, Latin, music, philosophy, political science, regional planning, Russian, social science, social work, sociology, Spanish, speech, speech and drama. The Bachelor of Science degree is conferred upon students who major in biology, chemistry, earth science, fisheries management, geology, mathematics, medical technology, physics, pre-medical sciences, psychology, wildlife management.

Requirements for Graduation

Students file an application for graduation in the Dean's office. They should apply by the end of April if they will complete requirements in December, by October if they will graduate in May or August. **It is the student's responsibility to plan his program and to register for the proper courses so that he will have satisfied all requirements at the time he expects to graduate.**

The requirements for the degree are:

1. A minimum of 128 hours with a grade-point average of 2.0 overall and in the major. Thirty of the last 36 hours must be earned in residence at Eastern Kentucky University. Credits earned by correspondence study are accepted upon written approval of the Dean. Not more than twenty-five per cent of the total credits offered for the degree may be in correspondence and/or extension work.

2. The 128 hours must include the following general subject requirements:

6 hours in communications

12 hours in humanities

12 hours in social science

12 hours in mathematics and natural science (all may be in natural science with at least three hours in biological science and three hours in physical science)

5 hours in health and physical education

8 hours in military science or four hours in military science and four hours in approved options (men only)

(See General Academic Information for specific course requirements.)

3. Area, major and minor requirements. Each student must have an area of specialization or a major and minor subject of specialization except that he may have a single major with supporting courses in lieu of a minor if he is obtaining a teaching certificate in the following disciplines: art, biology, chemistry, English, history, mathematics and music. The minimum total number of hours in the area and in the major-minor combination must equal 48. See the programs outlined under each department for the specific course requirements.

Each student must officially register his area or his major and minor when he is admitted into the College of Arts and Sciences. He does so by applying for a planned curriculum. If he plans to receive a certificate to teach, he applies while enrolled in EDF 202 or EDF 300. Otherwise he applies in the Office of the Dean, College of Arts and Sciences. Each student's planned curriculum will be prepared in consultation with a faculty advisor from the major department staff who will continue as the student's advisor until graduation. Any change in the planned curriculum must be approved by the advisor, the Dean of the College of Arts and Sciences, and the College of Education (if with right of certification).

GRADUATE PROGRAMS

In cooperation with the Graduate School, the College offers Master of Arts programs in English, Geography, History and Political Science; Master of Science programs in Biology, Chemistry, Geology, Physics and Psychology; and a Master of Music Education program, and a Master of Public Administration program. These programs are described in the Graduate Bulletin under the Departments of Biology, Chemistry, English, Geography, Geology, History, Music, Physics, Political Science and Psychology.

PRE-PROFESSIONAL CURRICULA

PRE-DENTAL HYGIENE CURRICULUM

Students interested in becoming dental hygienists may take two years of pre-dental hygiene and transfer these credits to a school of dental hygiene. The curriculum complies with the general entrance requirements for dental hygiene schools, although some modification may be necessary to meet the specific requirements of a few schools. A minimum of 64 credit hours (exclusive of physical education and academic orientation) must be completed before transferring to a school of dental hygiene.

Freshman	Hours	Sophomore	Hours
BIO 141, 211	8	BIO 221, 242	9
CHE 111, 112	9	GSP 281	3
GSE 101, 102	6	Humanities electives	6
GSO 100	1	NFA 201	3
GSP 180, 181	2	PSY 211, 305	6
MAT 107	3	SOC 231, 320 or 335	6
SPE 100	3	MIL 201, 202 or options (Men)	4
MIL 101, 102 (Men)	4		
	32-36		33-37

PRE-ENGINEERING CURRICULUM

A student may take one or two years of fundamental work and then transfer to an engineering college without appreciable loss of credits if he chooses his courses wisely. The pre-professional courses should be chosen from mathematics, chemistry, physics, and other basic subjects.

Freshman	Hours	Sophomore	Hours
CHE 111, 112	9	MAT 112 or 213 213 or 453	7-8
GSE 101, 102	6	MIL 201, 202 or options (Men)	4
GSP 180, 181	2	PHY 107, 201, 202, 220	14
MAT 109 or 111, 111 or 112	8-9	Electives*	10
MIL 101, 102 (Men)	4		
INT 191	3		
Electives*	3		
	35-36		35-36

*To be approved by a pre-engineering advisor.

PRE-FORESTRY CURRICULUM

Arrangements made through the Southern Regional Education Board provide for students who wish to prepare as professional foresters to do the first two years of their work at Eastern Kentucky University and complete their training in two years and one summer at North Carolina State University in Raleigh.

The minimum requirements for admission to a school of forestry are given under Agriculture in the College of Applied Arts and Technology.

Students may elect a three-year program and graduate with a Bachelor of Science degree with a major in biology by transferring 30 semester hours from an accredited school of forestry. This can be done by completing two years as outlined in the Pre-Forestry Curriculum in the Central University College section and by completing certain other requirements including the following:

GLY 200
AGR 215
ECO 230
PHY 131 and 132
BIO 335, 336 or 328 and 315
Humanities elective, 6 hrs.

PRE-OPTOMETRY CURRICULUM

Students who plan to enter the field of optometry may elect to take two years of pre-optometry and transfer these credits to an optometry school. A minimum of three years work is required in the optometry school for the Doctor of Optometry (O.D.). Some optometry schools require four years for the O.D. and several universities have graduate programs leading to the M.S. and Ph.D. degrees in addition to programs leading to the O.D.

Requirements for admission to optometry schools vary. The student wishing to enter a pre-optometry program should immediately secure a bulletin from the optometry school of his choice.

Courses which students may take to meet requirements for admission to most optometry schools should include the following ones:

Freshman	Hours
GSE 101, 102	6
Social Science	6
GSP 181, 182, 281	5
MAT 109, 111	9
CHE 111, 112	9
	35

Sophomore	Hours
BIO 141, 221	8
PSY 211	3
MIL 101, 102, 201, 202 (or options)	8
PHY 131, 132	10
Humanities	4
	33

Students may elect to obtain a Bachelor of Science degree at Eastern before obtaining the Doctor of Optometry in an optometry school. In this event the curriculum will be outlined by the science department in which each student majors, and approved by the Dean of Arts and Sciences.

A limited number of Kentucky residents may be accepted for a scholarship at the School of Optometry, University of Houston. The Commonwealth of Kentucky will pay the University of Houston the non-resident differential in an amount not to exceed $375 per academic year for those students who exhibit satisfactory progress toward completion of the prescribed four-year curriculum at the University of Houston.

Application forms may be secured from the Executive Director, Council on Public Higher Education, 319 Ann Street, Frankfort, Kentucky. The quota for new students is limited each year. For further information, students should consult with the chairman, Department of Physics.

PRE-PHARMACY CURRICULUM

Students who plan to enter the field of pharmacy may take two years of pre-pharmacy and transfer these credits to a pharmacy school. The curriculum given below will meet the requirements of most pharmacy schools. Students wishing to enter the program should determine the admission requirements of the pharmacy school of their choice and determine, after consulting the pre-pharmacy advisor, which courses to take.

Freshman	Hours	Sophomore	Hours
CHE 111, 112	9	CHE 213	4
GSE 101, 102	6	BIO 211, 221	8
MAT 109	5	GSS 246, 247 or HIS 202, 203	6
GSP 180, 181	2	ECO 230	3
MIL 101, 102 (Men) or Elective (Women)	4	MIL 201, 202 or options (Men) or Elective (Women)	4
BIO 131	4	PHY 131, 132	10
Electives*	6		
	36		35

*Electives should be chosen to meet the requirements of the college in which study for the pharmacy degree will be completed.

PRE-VETERINARY MEDICINE CURRICULUM

A limited number of students who are residents of Kentucky and who have completed the required pre-veterinary medicine courses are selected each year to study veterinary medicine at Auburn University, Auburn, Alabama; Tuskegee Institute, Tuskegee, Alabama and the Ohio State University, Columbus, Ohio.

The students are exempt from the out-of-state tuition charge that would normally apply to a Kentucky resident. They enter the four-year program at the beginning of the fall term each year and are approved for succeeding years so long as normal progress is made toward the degree in veterinary medicine.

The program is made available by an appropriation of the General Assembly to the Kentucky Council on Public Higher Education which administers it in cooperation with The Southern Regional Education Board and the three above named institutions.

Students may be admitted to a school of veterinary medicine with a minimum of two academic years of undergraduate study. See requirements given under Department of Agriculture, College of Applied Arts and Technology. They may elect a three-year program at Eastern and graduate with a Bachelor of Science degree with a major in biology by transferring 30 semester hours from an accredited school of veterinary medicine. This can be done by completing two years as outlined in the Pre-Veterinary

Curriculum in the Central University College section and by completing certain other requirements necessary for graduation including the following:

CHE 361 and 362
BIO 221 or 315 and 348
ENG 209 or 211 and 210 or 212
AGR 221
Social Science
electives, 6 hrs.

CURRICULUM PREPARATORY FOR MEDICINE, DENTISTRY AND MEDICAL TECHNOLOGY

The Pre-Medical Sciences curriculum should be followed by both premedical and pre-dental students. This curriculum complies with the general entrance requirements for medical and dental schools, although some modification may be necessary to meet the specific requirements of a few schools. Completion of this program fulfills the requirements for graduation from Eastern with a Bachelor of Science degree.

It is recommended that students complete the four-year program before transferring to medical school. Some medical schools require a four-year course for admission.

Students may elect to complete the first three years of this program and use the first year of work from an accredited medical or dental school to complete the requirements for the Bachelor of Science degree. Medical schools should be approved by the Association of American Medical Colleges and the American Medical Association. Dental schools should be approved by the Council on Dental Education of the American Dental Association.

PRE-MEDICAL SCIENCES CURRICULUM

The first two years of this curriculum may be found in the Central University College section.

In addition to general education requirements the total program shall include BIO 141, 211, 221, 242, 315, 348, 546 and 547; CHE 111, 112, 213, 361, 362, and 570; MAT 109 and 111; PHY 131 and 132, SOC 231.

Junior	Hours
CHE 361, 362	9
ENG 209 or 211 210 or 212	6
BIO 315, 348	8
PHY 131, 132	10
	33

Senior	Hours
BIO 546, 547	7
Foreign Lang.	6
Electives (u.d.)	12
CHE 570	5
Social Science (Area III, B.2., upper division)	3
	33

MEDICAL TECHNOLOGY CURRICULUM

Eastern offers students interested in becoming medical technologists the required three years of college work necessary to qualify for training at a school of medical technology.

A Bachelor of Science degree may be obtained from Eastern after completion of the three-year curriculum outlined below and in the Central University College section, and the program of a school of medical technology accredited by the American Society of Clinical Pathologists. Credit equivalent to a fourth year of course work must be transferred back to Eastern.

Junior	**Hours**
CHE 361, 362	9
BIO 221, 348, 311 or 546	10–11
PHY 131, 132	10
Humanities electives (Area II. B.)	6
	35–36

Senior

Work must be taken at an accredited school of medical technology.

ANTHROPOLOGY AND SOCIOLOGY (ANT & SOC)

Richard Armstrong, Chairman; Anthracopoulos; Hanson, Larson, Mohanty, B. Stark, J. Tucker, J. M. Walker, D. Ward, P. Webb, and V. Wisenbaker.

The multi-disciplinary nature of the department requires curricula designed to accomplish several purposes:

To provide students with greater understanding of the social world.

To provide students with a fundamental background as preparation for future graduate-level study.

To provide students with training that will fit them for immediate opportunities in public service agencies.

The Department of Anthropology and Sociology offers three majors:

1. The major in Anthropology is intended primarily to prepare students for graduate study in that field. Secondarily, the major is offered as an adjunct for those students who wish to combine Anthropology with another area which will provide them with employment opportunities.

2. The major in Sociology is designed to provide preparation for graduate study, and as a strong major in the social sciences for those with indefinite vocational goals. Persons with Sociology majors find employment and academic opportunities in teaching, social welfare, personnel and industrial placement, research opportunities in public and private agencies, and work in community organizations such as city planning departments, health and recreation facilities, and housing developments.

3. The major in Social Work is designed to serve three purposes:
    a. As preparation for graduate study in a school of social work.
    b. As preparation for entry into public welfare.
    c. As background material so that, as a citizen, the student can understand, discuss, and act on social welfare issues.

Because of these differing academic purposes the student is urged to give special attention to each of the divisions in his choice of courses selected in conference with his advisor.

ANTHROPOLOGY (ANT)

A student may major in Anthropology (non-teaching) by completing a minimum of 30 hours as follows: ANT 201, 202, 330 or 335; 15 hours of upper division Anthropology to include at least 6 hours from the following: ANT 310, 425, and 440; plus 6 hours from outside Anthropology to be selected in consultation with the advisor.*

A student may minor in Anthropology by taking a minimum of 18 hours as follows: ANT 110, 201, 202, plus 9 hours of upper division Anthropology electives.*

Curriculum for a major in Anthropology

Junior	Hours	Senior	Hours
ANT 330 or 335	3	ANT 310, 425, 440	6
ANT Electives	6	ANT Electives	3
Supporting Electives	3	Supporting Electives	3
Electives	20	Electives	20
	32		32

*Credit not allowed for both general education and major or minor requirements for the following courses: ANT 110, GEO 101, 102, 210, GLY 109, 211.

SOCIOLOGY (SOC)

A student may major in Sociology (teaching and non-teaching) by taking thirty hours at the sophomore level and above. The following Sociology courses are required: SOC 231, 232, 320, 395, 460 and 461. The remaining twelve hours are to be elected as follows with at least 3 hours from each Category below:

A. SOC 335, 337, 340, 353, 355, 375
B. SOC 332, 345, 400, 410, 450, 465
C. SOC 360, 425, 455, 463, 470

A student may minor in Sociology by completing the following courses: Sociology 231, 232, 460, 461, plus six hours of upper division Sociology electives.

It is strongly recommended that students majoring in Sociology also elect nine hours from the following areas: anthropology, economics, philosophy, political science or psychology.

Curriculum for a major in Sociology (teaching):

A student with a major in Sociology (teaching) must have a second major or minor in history, English, or political science. The first two years of the curriculum (for teaching and non-teaching) may be found in the Central University College section.

Junior	Hours	Senior	Hours
EDF 317	4	SOC Electives	12
SOC 320, 395	6	Electives	3
SOC 460, 461	6	ESH 498	4
Electives	15	ESH 499	10
		ESH 449	3
	31		32

Curriculum for a major in Sociology (non-teaching):

Junior	Hours	Senior	Hours
SOC 320, 395	6	SOC 460, 461	6
SOC Electives	12	SOC Electives	15
Electives	15	Electives	10
	33		31

SOCIAL WORK (SWK)

A student may major in Social Work (non-teaching) by taking thirty hours at the sophomore level and above. The following courses are required: SOC 231, 232, 335, SWK 370, 415, 500, 505; and nine hours upper division Sociology and/or Social Work electives. To broaden their experience, students are strongly urged to complete their programs with electives selected from anthropology and sociology, economics, philosophy, political science, or psychology. The first two years of the curriculum is the same as for Sociology and is located in the Central University College section.

Junior	Hours	Senior	Hours
SWK 370 and 415	6	SWK 500 and 505	6
SOC 232 and 335	6	SWK Elective	3
SOC Electives	6	SOC Electives	9
*Electives	15	*Electives	15
	33		33

*See recommended departments above.

ANTHROPOLOGY (ANT)

ANT 110. Societies Around the World. **Three hours.** I, II.

Descriptive survey of selected primitive and folk cultures from various parts of the world, with emphasis on material culture and economic, social, political, and religious structure. Attention given to the levels of socio-political and technological development and to the concept of culture areas, as well as to the factor of global distribution.

ANT 201. (Formerly covered in part by ANT 230.) Introduction to Physical Anthropology. **Three hours.** A.

General survey of principal areas of physical anthropology, including an appraisal of man's place within the biological realm; an examination of the fossil evidence for man's origin and early development; formation and spread of modern racial groups; and the role of genetics in the study of man.

ANT 202. (Formerly covered in part by ANT 230.) Introduction to Cultural Anthropology. **Three hours.** I, II.

Introduction to the anthropological approach to the social sciences with emphasis on culture and related concepts. Brief survey of prehistoric archaeology and linguistics. Development of generalizations concerning material culture, economic organization, social structure, religion, political system, etc., based chiefly on the comparative study of various primitive societies of the present and recent past.

ANT 300. (Formerly ANT 200.) Bio-Anthropology . **Three hours.** A.

Prerequisite: Consent of instructor.

Historical and comparative treatment of man's place in the animal world, with emphasis on human fossils and living primates; the various racial groups, with emphasis on genetics and problems of classification; the processes of human growth and the interrelation of the biological with the cultural aspects of man.

ANT 310. Survey of Old World Archaeology. **Three hours.** A.
Prerequisite: Consent of instructor.
Origin, growth, and spread of prehistoric and early historic cultures in Africa, Asia, and Europe.

ANT 330. American Indians. **Three hours.** A.
Prerequisite: ANT 110 or 201 or 202, or censent of instructor.
Descriptive and comparative study of representative native American cultures, with emphasis on Indians of North America. Consideration of the culture area concept, economic, social, political, and religious structure, linguistic classifications, and changes in culture since European contact.

ANT 335. Native African Cultures. **Three hours.** A.
Prerequisite: ANT 110 or 202.
Descriptive and comparative study of representative native African cultures south of the Sahara. Consideration of the culture area concept, economic, social, political, and religious structure, and problems arising out of contacts with European civilizations.

ANT 340. Folk and Peasant Societies. **Three hours.** A.
Prerequisite: ANT 110 or 202; or consent of instructor.
Folk or peasant form of adaptation. Emphasis given to the relatively stable nature of these societies, and their extensiveness. Consideration of problems arising when contacts are made with non-peasant societies.

ANT 420. Culture and Religion. **Three hours.** A.
Prerequisite: ANT 202 or consent of instructor.
Religious ideas, rituals, and organizations of primitive peoples; attention given to theories of origin and development and to function of religion in social systems.

ANT 425. (Formerly ANT 350.) Social Organization. **Three hours.** A.
Prerequisite: ANT 110 or 202; or consent of instructor.
Relationships between cultural systems and physical environment; marriage and family organization; development of political and legal systems.

ANT 440. Culture and Language. **Three hours.** A.
Prerequisite: Consent of instructor.
Analysis of the role of language in human experience; mutual effect of language on culture and culture on language.

ANT 465. Field Methods in Anthropology. **Three hours.** A.
Prerequisite: Twelve hours in courses accepted toward Anthropology major, or consent of instructor.
Primarily for Anthropology Majors. Introduction to methods and techniques in both field and library research. Such topics considered as defining the problem, designing the study, collecting and analyzing the data, and writing the report.

ANT 555. History of Anthropological Theory. **Three hours.** A.
Prerequisite: ANT 110, 201, and 202; or consent of instructor.
Historical survey of the major theories and schools of thought in the area of scientific anthropology, including an appraisal of the various competing views on the current scene.

ANT 590. Tutorial in Anthropology. **Three hours.** A.
Prerequisite: Twelve hours in courses accepted toward major in anthropology, including ANT 110, 201, and 202; or departmental approval.
Individual reading and research on a problem or area within the field of anthropology by the student after consultation with the instructor.

GRADUATE COURSES

ANT 600. Anthropology and Modern Life. **Three hours.** A.
Extensive review of the field of anthropology, with emphasis on implications of recent theoretical and factual developments for man in the modern world.

ANT 610. Anthropology and Education. **Three hours.** A.

Prerequisite: ANT 600 or an undergraduate background in anthropology.

Cross-culture analysis of educational processes; growth, adaptation, and personality development of the child (enculturation and socialization), including the transmission of skills, knowledge, attitudes and values; the relationship of the educational process to social structure.

SOCIOLOGY (SOC)

SOC 231. Introductory Sociology. **Three hours.** I, II.

Basic principles and concepts of Sociology, including culture, personality, social structures and groupings, social processes and social change.

SOC 232. Introductory Sociological Analysis. **Three hours.** A.

Prerequisite: SOC 231.

Analysis of sociological concepts in terms of concept formation, measurement, interpretation and presentation in graphic form.

SOC 320. Social Psychology. **Three hours.** I, II.

Prerequisite: SOC 231.

Relation of the individual to his socio-cultural environment, with special reference to personality development, interpersonal role-behavior, motivation, and social attitudes.

SOC 332. Urban Sociology. **Three hours.** A.

Prerequisite: SOC 231.

The Urban Concept; origin and development of urban areas; effects of urbanization on social institutions and social relations; research methods applied to urban life and form.

SOC 335. Social Problems. **Three hours.** I, II.

Prerequisite: SOC 231.

Analysis of selected social problems such as crime, mental illness, homosexuality, divorce, population, and poverty. The analysis includes the definition, causes, and consequences of social problems.

SOC 337. Population and Society. **Three hours.** A.

Prerequisite: SOC 231, or consent of Instructor.

An examination of population problems; national and international policies, and relationships between population and social structure.

SOC 340. Juvenile Delinquency. **Three hours.** A.

Prerequisite: SOC 231.

A survey of theories of juvenile delinquency, including evaluation of the constitutional, psychological, and sociological approaches, and dealing with prediction, treatment, and control.

SOC 345. Sociology of the Family. **Three hours.** A.

Prerequisite: SOC 231.

The family as an institution in society, its relation to cultural transmission and personality development, and its relations to the wider institutional structure of society.

SOC 353. Medical Sociology. **Three hours.** A.

Prerequisite: SOC 231, or consent of Instructor.

The social and cultural dimensions of health and sickness; analysis of the organized medical facilities in society.

SOC 355. Military Sociology. **Three hours.** A.

Prerequisite: SOC 231, or consent of Instructor.

The American Military as a social institution; analysis of stratification and normative systems, socialization processes and role configurations, interrelationships between the military and other institutions in society.

SOC 360. The Community. **Three hours.** A.

Prerequisite: SOC 231.

Characteristics of community relations in society; structure of and changes in community life; changing needs and resources of modern communities.

SOC 375. Criminology. **Three hours.** A.
Prerequisite: SOC 231.

A survey of theories of criminal behavior as applied to the social processes of law making and law breaking; prediction and control of crime.

SOC 395. (Formerly SOC 570.) Research Methods in Sociology. **Three hours.** I, II.
Prerequisite: SOC 231.

Methods and techniques of sociological research, including collecting, measuring, analyzing, and presenting data.

SOC 400. Racial and Cultural Minorities. **Three hours.** A.
Prerequisite: Six houurs in Sociology.

An analysis of minorities and intergroup relations from the point of view of contemporary sociology, anthropology, and social psychology; nature and types of racial and cultural groups; causes and consequences of prejudice and discrimination; the reduction of intergroup tensions.

SOC 410. Political Sociology. **Three hours.** A.
Prerequisite: SOC 231 or consent of instructor.

An analysis of political behavior and institutions within the structure of society; social attitudes, voting behavior, and political activity.

SOC 425. Sociology of Religion. **Three hours.** A.
Prerequisite: Six hours in Sociology.

Examination of the relationships between society, culture, and religion. The functioning of religious values, practices, and organizations in society.

SOC 450. Social Change. **Three hours.** A.
Prerequisite: Six hours in Sociology.

Analysis of theories of social and cultural change in terms of processes and direction; methodological commitments and implications of the various theories.

SOC 455. Collective Behavior. **Three hours.** A.
Prerequisite: Six hours in Sociology.

Analysis of mass phenomena such as public opinion, rumors, fads, mobs, riots, panics, and social movements, including a consideration of the development and termination of collective behavior forms.

SOC 460. Sociological Theory I—Classical writers. **Three hours.** I.
Prerequisite: Nine hours in Sociology.

The early developments in Sociological Theory; definition of the field and formation of schools of theory; the bases upon which contemporary theories are built.

SOC 461. Sociological Theory II—Contemporary writers. **Three hours.** II.
Prerequisite: Nine hours in Sociology.

The current state of Sociological Theories; recent formulations, controversies, and trends.

SOC 463. Social Stratification. **Three hours.** A.
Prerequisite: Six hours in Sociology.

Classic and recent studies of social classes and strata; critical analysis of research methods; social class, mobility aspirations.

SOC 465. Demography. **Three hours.** A.
Prerequisite: SOC 231 and 395.

Theories of population growth; factors affecting population size and composition such as mortality, fertility, morbidity, and migration; national population policies.

SOC 470. Seminar in Sociology. **Three hours.** A.
Prerequisite: Nine hours in Sociology or consent of Instructor.

A systematic overview of Sociology through a general survey of various subdisciplines of the field with emphasis on recent research, theory, issues and developments in each.

SOC 520. Social Organization. **Three hours. A.**
Prerequisite: Consent of Instructor.
Analysis of various types of organizations in American Society; internal and external processes and organizational structure.

SOC 590. Directed Study. **Three hours. A.**
Prerequisite: Departmental approval.
Individual reading and research on a problem or area within the field of sociology by the student after consultation with the instructor.

GRADUATE COURSES

SOC 620. The Family. **Three hours. A.**
Prerequisite: Consent of Instructor.
A study of the institutions of marriage and family from their earliest forms to present-day patterns; analysis of various forces which affect family structure and functioning.

SOC 625. The Sociology of Minority Groups. **Three hours. A.**
Prerequisite: Consent of Instructor.
An examination of intergroup relations; the sociological significance of race and ethnicity, including the dynamics of prejudice and discrimination. Coping with intergroup tensions.

SOC 680. Survey Design and Analysis. **Three hours. A.**
Prerequisite: Departmental approval.
Systematic exploration of survey research pproblems with application of general methodological principles to the operating context of social surveys.

SOCIAL WORK (SWK)

SWK 210. Introduction to Social Welfare. **Three hours. A.**
The changing relationship of Social Welfare to the socio-economic and political climate of modern industrial society.

SWK 370. Welfare as a Social Institution. **Three hours. A.**
Prerequisite: SOC 231.
Consideration of welfare as a basic institution in modern society, with emphasis on the functions and philosophy of social welfare as related to the various divisions in the field.

SWK 415. Methods of Social Work.
Prerequisite: Sociology 231 and SWK 370.
The methods used in the various fields of Social Work, including case work, group work, and community organization.

SWK 420. Child Welfare. **Three hours. A.**
Prerequisite: SOC 231.
A survey of the field of child welfare, its scope, service and functions as practiced by governmental and private social work agencies.

SWK 500. Problems and Issue in Social Work.
Prerequisite: Six hours in Social Work.
Discussion of current problems and issues in the fields of Social Work and Social Welfare.

SWK 502. Human Behavior and Social Environment.
Growth processes and development within the family, group, and community; relationship of human behavior and social functioning to native endowment and to cultural patterns.

SWK 505. Field Experience in Social Agency. **Three hours. A.**
Prerequisite: SWK 500.
Supervised experience in a social agency with emphasis upon interdependence between theory and practice.

SWK 607. Social Work and Social Services.
A survey of the broad field of social welfare including its basic philosophy and objectives. Attention is given to community resources including eligibility requirements and benefits of programs of public and private agencies.

SWK 608. Interviewing and Casework in the School Setting.
An examination of school social work as it relates to the total field, with emphasis upon casework with the child and his family, and including interviewing with children and adults.

ART (ART)

D. N. Shindelbower, Chairman; Dozier, Fedorowicz, E. Hale, P. Harris, Hitner, R. Isaacs, Newhoff, Tinsley, J. Todd, Whitcopf, J. W. Williams, and J. Wright.

A student may take a major (teaching or non-teaching), a second major, an area (teaching), or a minor in art (teaching or non-teaching).

The requirements for a major in Art (teaching) are ART 100, 101, 102, 103, 203, 204, 227 or 327 or 328, 229, 329, 390, 391, 430, 562.

The requirements for a major in Art (non-teaching) are ART 100, 101, 102, 103, 203, 227, 229, 330, 390, 391, 392, 562. The Art major (non-teaching) is required to take twelve hours in a foreign language if he begins the language in college, or six hours if he continues the language at the intermediate level.

The requirements for an area (teaching) in Art are ART 100, 101, 102, 103, 203, 204, 227, 229, 329, 327, or 328, 330, 390, 391, 392, 430, 562, and six hours of electives in Art.

The requirements for a minor (non-teaching) in Art are ART 102, 103, 390 or 391 or 392, and nine hours of electives in Art.

The requirements for a minor (teaching) in Art are ART 102, 103, 390 or 391 or 392, 430, and nine hours of electives in Art, a required total of 21 hours for a teaching minor.

The Art Department, in cooperation with the Graduate School and the College of Education, also offers an emphasis in Art applying toward the M.A. degree in Education. The regulations for the M.A. degree in Education may be found in the College of Education section of the Graduate Bulletin.

Curriculum for a major in Art (teaching). The first two years of this curriculum may be found in the Central University College section.

Junior	Hours
ART 227 or 327 or 328	3
ART 229 or 329	3
ART 390, 391	6
EDF 317	4
General Education Literature	3
Social Science Elective	3
Science or Math Electives	6
Electives (Minor)	3
	31

Senior	Hours
ART 430, 562	6
ESH 498, 499	14
ESH 440	3
Electives (minor)	9
	32

Curriculum for a major in Art (non-teaching). The first two years of this curriculum may be found in the Central University College section.

Junior	Hours	Senior	Hours
ART 330, 390, 391	9	ART 392, 562	6
General Education Literature	3	Approved Electives	18
Science or Math Elective (U.D.)	6	Electives (minor)	9
Approved Electives	7		
Elective (minor)	6		
	31		33

Curriculum for an area in Art (teaching). The first two years of this curriculum may be found in the Central University College section.

Junior	Hours	Senior	Hours
ART 327 or 328	3	ART 392, 430, 562	9
ART 329	3	ESH 440	3
ART 330, 390, 391	3	ESH 440	3
EDF 317	4	Electives (ART)	6
General Education Literature	3		
Social Science Elective	3		
Science or Math Electives	6		
	31		32

ART

ART 100. Drawing I. **Three hours.** I.
An introduction to the basic principles of drawing, placing emphasis on design with value, line, and texture.

ART 101. Drawing II. **Three hours.** II.
Prerequisite: ART 100.
A continuation of Drawing I; observation of natural forms.

ART 102. Design, Two-Dimensional. **Three hours.** I.
An introduction to the abstract characteristics of design with color, line, and texture.

ART 103. Design, Three-Dimensional. **Three hours.** II.
An introduction to the methods, materials, and concepts related to the control of space.

ART 117. Drawing and Design. **Three hours.** I, II.
An introduction to the basic knowledges and skills in art through the use of pencil, tempera, water color, and colored chalks; emphasis placed upon the development of an understanding and appreciation of the principles of creative design in the visual arts.

ART 200. Art Appreciation: Orientation. **Three hours.** I, II.
Designed to acquaint the student with the visual arts and their purposes, with emphasis placed upon the ways and means available to the artist in his production. Not open to art majors or minors.

ART 202. Ceramic and Ceramic Sculpture. **Three hours.** A.
Prerequisite: Permission of instructor.
Introductory experiences with ceramic forming methods, decorating techniques, and materials. Emphasis placed upon designing as creative problem solving.

ART 203. Painting I. **Three hours.** I.
Prerequisite: ART 101, 102.
Design with color, line, and texture; with emphasis on color.

ART 204. Painting II. **Three hours.** II.
Prerequisite: ART 203.
Problems in color, line, and texture as they relate to painting media.

ART 227. Sculpture: The Additive Process. **Three hours.** I, II.
Prerequisite: ART 103.
Development of concepts related to the additive process of sculpture; plasticine, clay, plaster, and wax.

ART 229. Crafts, Clay. **Three hours.** A.
Prerequisite: ART 103.
Application of clay to design problems involving aesthetic value (function) and procedure in the making of fine objects.

ART 317. Lettering and Poster Design. **Three hours.** A.
Application of art principles in the production of hand lettering, lettering structure, spacing, and poster design.

ART 321. Drawing and Illustration. **Three hours.** A.
Prerequisite: Art 117.
The illustration of ideas, with special consideration given to perspective and pictorial composition using pencil, charcoal, water color, and ink.

ART 327. Sculpture: The Constructive Process. **Three hours.** A.
Development of concepts related to the constructive process of sculpture: wood, metal, plaster, and related materials.

ART 328. Sculpture: The Subtractive Process. **Three hours.** A.
Development of concepts related to the subtractive process of sculpture: wood, stone, and related materials.

ART 329. Crafts, Metals. **Three hours.** A.
Prerequisite: ART 103.
Application of metal to design problems involving aesthetic value (function) and procedure in the making of fine objects.

ART 330. Graphics. **Three hours.** I.
Prerequisite: ART 101, 102.
Basic experiences in relief, intaglio, and planographic printmaking.

ART 360. The Art Process and Materials in the Elementary School. **Three hours.** I, II.
Prerequisite: Open Only to Junior Elementary Education Majors.
A diversified inquiry into art materials, process and procedures in the elementary school.

ART 390. Survey of Art History. **Three hours.** I, II.
The development of art and architecture from the Stone Age through the Early Middle Ages.

ART 391. Survey of Art History. **Three hours.** I, II.
The development of art and architecture from the Late Middle Ages through the Baroque and Rococo

ART 392. Survey of Art History. **Three hours.** I, II.
The development of art and architecture from Neo-Classicism and Romanticism through Contemporary.

ART 430. Materials Inquiry in Art Education. **Three hours.** I, II.
Prerequisite: Open Only to Senior Art Students Who Plan to Teach.
A diversified inquiry into art materials and processes in the elementary and secondary schools.

ART 521. Advanced Drawing. **Three hours.** I, II.
Prerequisite; ART 100, 101.
Designed to meet the needs of students who wish to develop further their skill in, and understanding of, drawing.

ART 522. Advanced Painting. **Three hours.** II.
Prerequisite: ART 203, 204.
Designed to meet the needs of students who wish to further develop their skill in, and understanding of, painting.

ART 562. Seminar in Art Criticism. **Three hours.** I, II.
Prerequisite: ART 390, 391.
The study of various topics and problems which relate to the student's understanding and critical awareness of the visual arts.

ART 563. Problems in Art. **Three hours.** I, II.
Prerequisite: All departmental courses in problem area identified. Limited to seniors and graduate students. May be repeated twice.
Continuation of study begun in regular departmental courses.

GRADUATE COURSES

ART 602. The Art Program in the Public School. **Three hours.** A.
Prerequisite: Six hours in art.
An analysis of the history of art education in the public schools coupled with a study related to planning and organization of contemporary art education programs.

ART 621.* Drawing. **Three hours.** A.

ART 622.* Painting. **Three hours.** A.

ART 627.* Sculpture. **Three hours.** A.

ART 629.* Crafts, Clay. **Three hours.** A.

ART 630.* Graphics. **Three hours.** A.

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*Courses in the series, Art 621 through Art 630, share the prerequisite "six hours of work in the specialization named or consent of instructor." Students may register for no more than nine hours of any specialization offered.

BIOLOGICAL SCIENCES (BIO)

Edwin A. Hess, Chairman; Batch, Branson, Creek, Fulton, Harley S. Jones, Keefe, LaFuze, Larance, M. McGlasson, Otero, Rudersdorf, Schroeder, M. Thompson, Varney, Whitt, J. Williams.

The Department of Biological Sciences provides several different curricula for students interested in a variety of professions related to biology. A student may select courses in areas of specialization in biology, botany, zoology, fisheries management, wildlife management or medical technology. Other areas such as pre-forestry, pre-veterinary medicine, pre-medicine, pre-physical therapy and pre-dental hygiene are advised by members of the department.

For the student interested in biology, botany, zoology, fisheries management or wildlife management, a core of courses in biology is required. These courses are: BIO 131, 141, 211, 221 or 242 or 325 or 330, 315, 328 or 348 and 490. The more advanced course planning is determined in consultation with the student's upper division advisor. All requirements for other areas of specialization are listed elsewhere in this catalog.

The first two years of each student's curricula are found in the Central University College section of this catalog.

BIOLOGY (Teaching)

Curriculum for the last two years

Junior	Hours	Senior	Hours
BIO*	8	BIO*	5–6
CHE 361 or minor**	5	PHY 132 or GLY 210	4–5
General Education Humanities	6	ESH 498, 499	14
ENG 209 or 211	3	ESH 441	3
ENG 210 or 212	3		
PHY 131	5		
EDF 317	4		
	34		26–28

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*Students interested in botany should select from: BIO 311, 316, 325, 330, 335, 336, 341, 355, 510, 514, 521, 522, 523, 524, 526, 542, 558 and 598. Students interested in zoology should select from: BIO 311, 316, 318, 341, 355, 510, 514, 522, 523, 524, 527, 540, 542, 546, 547, 549, 550, 553, 554, 556, 557, 558, 561, 562 and 598. Selection of courses in different areas of specialization is encouraged and should be planned in consultation with the upper division advisor. At least one field course is required unless approved by the Chairman of the Department of Biological Sciences.

**A minor in chemistry is highly recommended. The minor may be obtained by completing CHE 362 or CHE 570.

BIOLOGY (Non-Teaching)

Curriculum for the last two years

Junior	Hours	Senior	Hours
BIO*	8	BIO*	12
CHE 361	5	BIO elective and/or minor**	15
PHY 131 and 132	10		
ENG 209 or 211	3		
ENG 210 or 212	3		
	29		27

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*Students interested in botany should select from: BIO 311, 316, 325, 330, 335, 336, 341, 355, 510, 514, 522, 523, 524, 526, 542, 558 and 598. Students interested in zoology should select from: BIO 311, 316, 318, 341, 355, 510, 514, 522, 523, 524, 527, 540, 542, 546, 547, 549, 550, 553, 554, 556, 557, 558, 561, 562 and 598. Selection of courses in different areas of specialization is encouraged and should be planned in consultation with the upper division advisor. At least one field course is required unless approved by the Chairman of the Department of Biological Sciences.

**A minor in either chemistry, physics, mathematics or geology is recommended. Exceptional students in biology may be recommended by the faculty for graduate study.

FISHERIES MANAGEMENT

The curriculum for specialization in the area of Fisheries Management prepares the student for employment in careers with the natural utilization resource agencies at local, state, federal and private levels.

Junior	Hours	Senior	Hours
BIO*	19	BIO*	21-23
PHY 131, 132 or GLY 210, 211 or CHE 361, 362	8–10	CHE 570	4
ENG 209 or 211	3		
ENG 210 or 212	3		
	33–35		25–27

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*BIO 316, 335, 341, 510, 524, 557, 558, 561 and 598 are additional requirements. The student's selection should be planned in consultation with his advisor.

WILDLIFE MANAGEMENT

Junior	Hours	Senior	Hours
BIO*	16	BIO*	24–26
PHY 131, 132, GLY 210, CHE 361, 362 or 570/ student must complete two courses	8–10		
ENG 209 or 211	3		
ENG 210 or 212	3		
	30-32		24-26

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*BIO 382, 489, 558, 587, 589 and AGR 340 or GLY 414 are additional requirements for the area of specialization in wildlife management. At least one course must be completed from the following: BIO 318, 347, 355, 546, 550, 553, 554 and 557. At least one course must be completed from the following: BIO 335, 341, 514, 523, 524, 561 and 562.

MINOR IN BIOLOGICAL SCIENCES

A student may obtain a minor in Biology by completing 21 semester hours of credit in BIO 131, 141, 211, 221 or 242, 598 and four additional hours at the 300-500 level. CHE 111 and 112 must be completed as prerequisites.

GRADUATE STUDY IN THE BIOLOGICAL SCIENCES

The Department of Biological Sciences provides ample opportunities for the competent student to complete graduate work for the degree Master of Science in the areas of plant or animal morphology, plant or animal physiology, microbiology, genetics, invertebrate zoology, aquatic biology, wildlife ecology and fisheries ecology.

The Department of Biological Sciences offers graduate work in the degree Master of Arts in Education for the competent secondary education teacher of science. The program offers a broad scope of courses in biology intended to broaden the biological knowledge of career teachers in botany, zoology, genetics, cell biology, microbiology, and physiology.

The general requirements for Admission to the Graduate School are described under that section of this catalog. A more detailed description may be obtained in the *Graduate Catalog.* The prospective graduate student may obtain detailed departmental information on the various programs in the *Introduction to the Graduate Programs in Biology* provided by the Department of Biological Sciences.

The academic requirements differ for the two graduate degrees, but both include the satisfactory completion of a minimum of thirty semester hours of credit (six of which may be transferred from another institution, subject to the approval of the Graduate School and the Department of Biological Sciences). The curriculum for each prospective graduate student is determined by a Departmental Advisory Committee. The courses required depend on previous undergraduate course work and performance.

BIOLOGICAL SCIENCES (BIO)

BIO 131. General Botany. **Four hours.** I, II.

Structure and functions of vascular plant organs, and morphology of representatives of the plant kingdom. Two lecture hours and four laboratory hours.

BIO 141. General Zoology. **Four hours.** I, II.

Morphology, physiology, development, life history, evolution and diversity of animals. Two lecture hours and four laboratory hours.

BIO 161. (Formerly Science 112, GSC 161.) Plant Science. **Three hours.** I, II.

(Not open to students who have completed college laboratory courses in biology or botany.)

The principles of plant biology, with emphasis of the angiosperms; basic concepts of reproduction in plants and inheritance. Two lecture hours and two laboratory hours.

BIO 162. (Formerly Science 111, GSC 162.) Animal Science. **Three hours.** I, II.

(Not open to students who have completed college laboratory courses in biology or zoology.)

The principles of animal biology, with emphasis on the vertebrates and the basic concepts of evolution. Two lecture hours and two laboratory hours.

BIO 171. Human Anatomy and Physiology. **Four hours.** II.

A general course designed for the non-major without prerequisites. Credit does not apply towards a major in Biology.

A survey of the organ system of the human body with emphasis on both anatomy and physiology. Modern principles of function are considered and related to certain areas of medicine and to health related professions. Laboratory will deal with the anatomy of the systems of the human body with emphasis placed on experiments which illustrate basic function of these systems. Two lecture hours and four laboratory hours.

BIO 204. Birds of Kentucky. **Two hours.** H, S.

A general course designed for the non-science major. No prerequisites. Credit does not apply toward a major or minor in Biology.

A popular consideration of the birds in general of the eastern and central United States from the Atlantic Coast to the 100th meridian in the Great Plains. Special emphasis on the birds of Kentucky and in particular the birds of the local area. Field trips required. One lecture hour and two laboratory hours.

BIO 211. (Formerly BIO 111.) Principles of Biological Systems. **Four hours. I, II.**
Prerequisite: BIO 131 or 141; CHE 111.

Cellular structure and function; tissue-organ system levels of organization; reproduction and development; and heredity and evolution. Three lecture hours and two laboratory hours.

BIO 221. Principles of Microbiology. **Four hours. I, II.**
Prerequisite: BIO 211 and CHE 112 or consent of instructor.

An introduction to the biology of microorganisms with emphasis placed on the physiology, culture and development of bacteria, fungi and viruses. Their role in medicine, agriculture and industry is also emphasized. Two lecture hours and four laboratory hours.

BIO 242. Comparative Anatomy. **Four hours.** I, II.
Prerequisite: BIO 141, 211.

Phylogeny and morphology of the classes of vertebrates. Comparative studies of organs and systems of vertebrate animals, based principally on the dogfish, necturus and cat. Two lecture hours and four laboratory hours.

BIO 273. Clinical Microbiology. **Four hours. I.**
Prerequisites: BIO 171 and CHE 104 or consent of the instructor.

A course designed for allied health fields. No credit allowed towards a major in Biology.

Role of microorganisms in the disease of man with emphasis on the differentiation and culture of microorganisms, types of diseases, modes of transmission, prophylactic, therapeutic and epidemiological aspects. Two lecture hours and four laboratory hours.

BIO 301. Human Physiology. **Three hours.** I, II .

A general course for the non-major. No prerequisites. Credit does not apply towards a major in Biology.

A general study of the basic functions of the systems of the human body. Students, interested in physiology laboratory exercises, may enroll concurrently in BIO 378 for one semester hour of credit.

BIO 305. History and Philosophy of Biology. **Three hours.** A.
Prerequisite: GSC 161 and 162 or consent of the instructor. Not open to students who have had SCI 310.

The development of biological thought from the time of the earliest man to the present. Special attention will be given to differences in methodology as well as to an analysis of philosophical factors which affect the type of explanations man has proposed for biological phenomena. Three lecture hours.

BIO 311. (Formerly BIO 445, 511.) Microtechnique. **Two hours.** I, II.
Prerequisite: BIO 131 or 141 and 211 or consent of the instructor.

Technique of preparing plant and animal tissues for microscopic study. Four laboratory hours.

BIO 315. (Formerly BIO 325, 515.) Genetics. **Four hours.** I, II.
Prerequisite: BIO 131, 141 and 211.

Introduction to the physical and biochemical principles of heredity and their application to plants and animals. Three lecture hours and two laboratory hours.

BIO 316. (Formerly BIO 451 and 517.) Ecology. **Four hours.** I.
Prerequisite: BIO 131, 141 and 211.

Basic concepts and principles as applied to the study of organisms or groups of organisms in their interrelations to each other and to their environment. Two lecture hours and four field-laboratory hours.

BIO 317. Conservation of Wildlife Resources. **Three hours.** I.

A general course designed for the non-science major. No prerequisites. Credit does not apply towards a major in biology.

Introduction to the principles and practices of conservation of plants and animals; requirements and values of wildlife resources; history and agencies of conservation. Three lecture hours.

BIO 318. General Parasitology. **Three hours.** I in even years.
Prerequisite: BIO 211 and CHE 213.
Fundamental principles of Parasitology, including basic morphology, classification, life cycles and host-parasite relationships. Two lecture hours and two laboratory hours.

BIO 325. (Formerly BIO 525.) Plant Anatomy. **Three hours.** I in odd years.
Prerequisite: BIO 131, 211 or consent of instructor.
Anatomy and histology of vascular plants, and phylogenetic developments and adaptive modification. One lecture hour and four laboratory discussion hours.

BIO 328. (Formerly BIO 32, 334, and 528.) Plant Physiology. **Four hours.** II in odd years.
Prerequisite: BIO 131, 211, CHE 112 or consent of instructor.
The chemical, physical and biological processes which occur in vascular plants. Two lecture hours and four laboratory hours.

BIO 330. (Formerly BIO 521 and 522.) Plant Morphology. **Four hours.** I.
Prerequisite: BIO 131.
Evolutionary morphology and the life histories of vascular and non-vascular plants exclusive of bacteria. Two lecture hours and four laboratory hours.

BIO 335. (Formerly BIO 555.) Plant Systematics. **Three hours.** II.
Prerequisite: BIO 131 and 211.
Identification, classification and phylogeny of vascular plants; principles of taxonomy; field trips required. One lecture hour and four laboratory hours.

BIO 336. (Formerly BIO 31, 536.) Dendrology. **Two hours.** A.
Prerequisite: BIO 131 and 211.
Classification and identification of woody plants and their economical value. Four laboratory discussion hours.

BIO 341. (Formerly BIO 44, 446, 541.) Invertebrate Zoology. **Four hours.** II in even years.
Prerequisite: BIO 141 and 211.
Comparative morphology, physiology, development, evolutionary relationship and life histories of the invertebrate animals. Two lecture hours and four laboratory hours.

BIO 348. General Physiology. **Four hours.** I, II.
Prerequisite: BIO 211 and CHE 213.
A study of the general physiological mechanisms which are basic to life processes, interpreted on chemical and physical principles. The course will include general principles of cell physiology, encompassing cellular function and intercellular reaction as related to the whole organism. Emphasis will be placed on organ and system function in relation to homeostatic mechanisms.

BIO 355. Entomology. **Three hours.** A.
Prerequisite: BIO 211.
Taxonomy, identification, life histories, physiology, economic importance, methods of control and collection of insects, with emphasis on local forms. One lecture and four laboratory hours.

BIO 378. (Formerly BIO 272 in part.) Experiments on the Function of the Human Body. **One hour.** I, II.
A general course designed for non-science majors.
Prerequisite: Majoring in home economics, physical education or special education and concurrent enrollment in BIO 301.

Laboratory experiments on neuromuscular, special senses, cardiovascular, respiration, digestion and excretion. Some emphasis is given to anatomy of each system. Two laboratory hours.

BIO 381. Principles of Wildlife Management. **Three hours.** II.
Prerequisite: BIO 211.
Basic principles of wildlife management and their application to current problems. Three lecture hours.

BIO 382. Wildlife Techniques. **Four hours.** I.

Prerequisite: BIO 381.

Techniques used in habitat evaluation, game mapping, identification, population dynamics and analysis. Two lecture hours, four laboratory hours.

BIO 403. Human Hereditary and Eugenics. **Three hours.** II.

A general course designed for non-science majors. No prerequisites. Credit does not apply towards a Biology major.

Inheritance in humans, including its implications upon society and man. Three lecture hours.

BIO 404. Economic Plants. **Three hours.** I.

A general course designed for non-science majors. No prerequisites. Credit does not apply toward a major or minor in Biology.

Origin, domestication, general anatomy, culture and use of plants economically important to man; deleterious effects of certain plants on man; influence of plants on man's aesthetic life, society and on world events. Three lecture-demonstration hours.

BIO 489. Field Studies in Wildlife. One to three hours (maximum of three total hours.) A.

Prerequisite: Approval of Chairman of the Department of Biological Sciences.

Required of all Wildlife Management majors during junior or senior year.

Field studies performed under the jurisdiction of faculty or a member of a natural resource agency. A minimum of three hours of laboratory per credit hour each week.

BIO 490. Biology Seminar. **One hour.** I, II.

Prerequisite: Senior Status in Biology.

Required of all Biology majors. Members of the faculty and majors meet weekly for presentation and discussion of classical and current scientific developments in various fields of the biological sciences. One discussion hour.

BIO 510. (Formerly BIO 611.) Quantitative Biology. **Two hours.** A.

Prerequisite: Three hours of college mathematics or consent of instructor.

Statistical analysis of biological data. Students participate in the taking of data and processing data by the use of well-established statistical techniques. Students planning to participate in the graduate program in any school should seriously consider this course. Four laboratory-discussion hours.

BIO 514. Evolution. **Three hours.** A.

Prerequisite: BIO 211 and 315.

The processes of organic evolution with emphasis on the theory of natural selection. Three lecture hours.

BIO 521. (Formerly BIO 627.) Advanced Plant Ecology. **Three hours.** A.

Prerequisite: BIO 316 or consent of instructor.

Plant life in relation to natural habitats and environmental factors; emphasis on instrumentation and methodology for ecological studies. Two lecture hours and three laboratory hours.

BIO 522. (Formerly BIO 622.) Bacterial Physiology. **Three hours.** A.

Prerequisites: BIO 221 and CHE 362 or consent of instructor.

Advanced study on microbial activity which includes composition of bacteria, growth, energy transaction and nutrition, and the effects of various chemicals and physical environments on bacteria. Two lecture hours and three laboratory hours.

BIO 523. Mycology. **Three hours.** II in even years.

Prerequisite: BIO 131, 211 and 221.

The morphology, physiology, taxonomy and economic importance of fungi. Field trips are required. One lecture and four laboratory-discussion hours.

BIO 524. Phycology. **Three hours.** I in even years.

Prerequisite: BIO 131, 211 or consent of instructor.

Morphology, taxonomy and ecology and the economic importance of algae. Two lecture hours and two laboratory hours.

BIO 526. Plant Pathology. **Three hours.** A.
Prerequisite: BIO 325 or 330 or consent of the instructor.

Principles of plant pathology: significance and the nature of plant disease resistance, pathogenesis and control. Two lecture hours and two laboratory hours.

BIO 527. Immunology. **Three hours.** A.
Prerequisite: BIO 221, CHE 213 or consent of instructor.

Principles of the immune reaction; nature of antigens, antibodies, antigen-antibody reaction, and allergic phenomena. Two lecture hours and three laboratory hours.

BIO 540. Cellular Physiology. **Four hours.** A.
Prerequisite: BIO 211, CHE 213 and PHY 131.

A study of cellular and basic physiological mechanism essential to life processes which will include: cellular growth and environment; cellular organization and control of energy metabolism; energy utilization and transduction in specialized cells. Emphasis will be given to the regulatory mechanisms in homeostasis, with methodology and techniques typical in modern physiological research. Two lecture and four laboratory hours.

BIO 542. Natural History of Invertebrates. **Three hours.** I in even years.
Prerequisite: BIO 141, 211.

Collection, systematics, distribution, behavior, ecology, and life histories of terrestrial and freshwater invertebrates. One lecture hour and four laboratory hours.

BIO 546. Histology. **Three hours.** I, II.
Prerequisite: BIO 141 and 242.

Microscopic anatomy of the normal vertebrate cells, tissues and organs. One lecture and four laboratory hours.

BIO 547. Comparative Vertebrate Embryology. **Four hours.** I, II.
Prerequisite: BIO 242.

Gametogenesis, fertilization, morphogenesis and organogenesis of the frog, bird and mammal. Particular emphasis is placed on mammalian development. Two lecture hours and four laboratory hours.

BIO 549. Endocrinology. **Three hours.** A.
Prerequsite: BIO 348 and CHE 361.

Basic principles of the functions of endocrine glands with emphasis on the hormonal regulation of physiological processes of the body. Two lecture hours and two laboratory hours.

BIO 550. Animal Behavior. **Four hours.** A.
Prerequisite: BIO 242, 316 or consent of instructor.

The advanced study of behavior with emphasis on inherited behavior patterns in relation to the evolution and ecology of animals. Three lecture-discussion hours and two laboratory hours.

BIO 553. Mammalogy. **Three hours.** I.
Prerequisite: BIO 242.

Classification, distribution and natural history of mammals. One lecture hour and four laboratory hours.

BIO 554. Ornithology. **Three hours.** II in even years.
Prerequisite: BIO 242.

Avian biology with emphasis on field identification of local avifauna, anatomy, physiology, ecology, evolution, migration, economic importance, distribution and behavioral patterns. A special investigative study required for all graduate students. Some early morning field trips required. Two lecture hours and four laboratory hours per week.

BIO 556. Herpetology. **Three hours.** II in odd years.
Prerequisite: BIO 242.

The natural history of the amphibians and reptiles including taxonomy, general ecology, behavior, distribution, breeding and food habits. Two lecture hours and three laboratory hours.

BIO 557. Ichthyology. **Three hours.** II in even years.
Prerequisite: BIO 242.
Internal and external morphology, taxonomy, life histories, ecology and phylogeny of the fishes of North America. Two lecture hours and three laboratory hours.

BIO 558. Limnology. **Three hours.** II in odd years.
Prerequisite: BIO 211, CHE 112 or consent of instructor.
Ecology of lakes and streams with special reference to physical, chemical and biological factors of lotic and lentic environments. Comparative field investigations, methods and instruments of limnological field investigation of lakes and streams. One lecture hour and four field-laboratory-discussion hours.

BIO 561. Fisheries Biology. **Four hours.** A.
Prerequisite: BIO 557 or consent of instructor.
Study of the anatomy, life histories, disease, conservation, methods of harvest, economic importance, and ecological interactions of fishes. Two lecture hours and six laboratory hours.

BIO 562. Fisheries Management. **Four hours.** A.
Prerequisite: BIO 558 and 561 or 557.
Methods of fish-catching in the world, making and setting nets, construction of fish ponds, management of lakes, ponds and streams. The culture of game fishes, fisheries, statistics, and field experiences. Two lecture and six laboratory hours.

BIO 571. Biology for High School Teachers. I. **Four hours.** A.
Prerequisite: One year of college Biology.
Basic principles of botany and zoology of special interest to in-service teachers of science; modern concepts and recent discoveries in biology; new approaches to biology at high school level. Lecture two hours, laboratory and discussion four hours.

BIO 572. Biology for High School Teachers II. **Four hours.** A.
A continuation of BIO 571. Lecture two hours, laboratory and discussion four hours.

BIO 585. Regional Wildlife Ranges. **Three hours.** II in odd years.
Prerequisite: BIO 316 and 382.
Distribution and management of game resources as determined by regional climate, physiographic, vegetative, and land-use factors. Three lecture hours.

BIO 587. Resident Wildlife Resources. **Four hours.** I.
Prerequisite: BIO 316, 382.
Taxonomy, life histories, distribution, environmental needs, economic status and plans for management of resident wildlife on forest, farm, and rangeland.

BIO 589. Migratory Wildlife Resources **Four hours.** I. II.
Prerequisite: BIO 316, 382.
Taxonomy, life histories, distribution, environmental needs, economic status and plans for management of doves, waterfowl, and marsh birds. Two lecture hours and four laboratory hours.

BIO 598. (Formerly BIO 498.) Special Problems. **One to three hours.** A.
Prerequisite: Senior or graduate standing and permission of the Chairman of the department or the Thesis Director. Permission must be obtained before registration in the course.
The student may repeat the course for a maximum total of four hours. A study of special problems, special biological techniques or group of organisms. A minimum of three laboratory hours per credit hour. A course designed to expose the undergraduate or graduate student to the problems in biological research and study in the various areas of specialization.

GRADUATE COURSES

BIO 601. Scientific Literature of Biology. **Two hours.** A.
Directed readings in Biology designed to acquaint the student with the major sources of literature, the delimitation of problems, note taking and the making of bibliographies. Two lecture-discussion hours.

BIO 605. Development of Biological Thought. **Three hours.** A.
The history of man's attempt to discover and explain biological phenomena. Special attention will be given to the interrelation of scientific disciplines as they affect biological thought. Selected case studies will be employed as a means of achieving depth as well as introducing the student to the literature of the history of biology. Three lecture hours.

BIO 612. Cytology and Cytogenetics. **Three hours.** A.
Prerequisites: BIO 211, CHE 261 or consent of instructor.
Cytological basic structures, their function, and their relationships to heredity mechanism in both plants and animals.

BIO 616. Biogeography. **Three hours.** A.
Prerequisite: BIO 316 or consent of the instructor.
Ecological, faunistic and floristic distribution on a world-wide basis. Theory of distribution pathways as regards final distribution. Three lecture hours.

BIO 625. Advanced Plant Morphogenesis. **Three hours.** A.
Prerequisite: BIO 330 or consent of the instructor.
Advanced study of plant growth with respect to cells and meristems; phenomena of morphogenesis, correlation, polarity, symmetry, differentiation, regeneration, and tissue mixtures. Three lecture hours.

BIO 635. Advanced Plant Systematics. **Three hours.** A.
Prerequisite: BIO 335 or consent of instructor.
Principles of the systematics of vascular plants with emphasis on comparative and experimental techniques. Consideration of theory and systems of phylogeny, classification and nomenclature. One lecture hour and four laboratory hours.

BIO 645. Vertebrate Physiological Ecology. **Three hours.** A.
Prerequisite: BIO 316, 348 and consent of instructor.
Comparative study of physiology mechanisms of vertebrates in response to changing environmental conditions. Topics emphasized include: Temperature adaptation, color change, orientation and biological rhythms. Two lecture hours and three laboratory hours.

BIO 647. Advanced Animal Ecology. **Three hours.** A.
Prerequisite: BIO 316 or consent of instructor.
Structure, composition and classification of biotic communities; population growth and regulation; interaction of populations; and techniques for measurement of environmental factors in terrestrial and aquatic environments. Two lecture-discussion hours and three laboratory-field hours.

BIO 649. Experimental Endocrinology. **Three hours.** A.
Prerequisite: CHE 361, BIO 348 and 549.
The bioassay, synthesis, metabolism and mechanism of action of hormones emphasized through various experimental designs. One lecture hour and four laboratory hours.

BIO 671. Biology for Elementary Teachers. **Three hours.** A.
Experiments and demonstration essential to the teaching of biological concepts of science grades K through 6. Six discussion laboratory hours.

BIO 690. Graduate Seminar. **One hour.** I, II, S.
Prerequisite: BIO 601.
Required of all graduate students; this course may be repeated for a maximum of two hours of credit. Presentation and discussion of current trends and concepts in the disciplines of the biological sciences.

BIO 691. Thesis Research. **One to three hours.** A.
Prerequisite: Approval by Thesis Director.
This course may be repeated, but a maximum of six semester hours of credit may be applied toward a degree. The student must apply research in the biological fields towards the preparation of a graduate thesis, as directed by the Thesis Director.

CHEMISTRY (CHE)

H. M. Smiley, Chairman; Bendall, Byrn, Chaney, Davidson, Luts, Meisenheimer, Powell, Salyer, Schulz, M. Taylor, R. Thompson.

A student may major in Chemistry (non-teaching) by completing CHE 111, 112, 213, 361, 362, 471, 472, 480, 514, 525, 550, 565; MAT 109, 111, 112, 213; PHY 201 and 202; GER 101, 102, 201 and 203. A year of Russian or French and additional courses in chemistry, physics and mathematics are recommended.

A student may major in Chemistry (teaching) by completing CHE 111, 112, 213, 361, 362, 471, 472, and five elective hours in Chemistry in courses numbered above 480. In addition, PHY 201 and 202; MAT 109, 111, 112, and 213 are required. A year of German is recommended.

A student may minor in Chemistry by taking CHE 111, 112, 213, and seven hours of upper division Chemistry courses. A total of 21 semester hours in Chemistry is required for a teaching minor.

The first two years of the curriculum for a major in chemistry may be found in the Central University Section.

Curriculum for a major in Chemistry (non-teaching)

Junior	**Hours**	**Senior**	**Hours**
CHE 361, 362, 471, 472	17	CHE 514, 480, 525, 550, 565	12
ENG 211, 212, or 209, 210	6	Electives*	16
GER 201, 203	6		
GSS 246, 247	6		
	35		28

*Electives must include six approved hours of social sciences and three hours of biological science.

Curriculum for a major in Chemistry (teaching)

Junior	**Hours**	**Senior**	**Hours**
ENG 211, 212, or 209, 210	6	CHE Electives	5
CHE 361, 362, 471, 472	17	ESH 498, 499	14
EDF 317	4	ESH 451	3
GSS 246, 247	6	Electives*	10
	33		32

*Electives must include six hours of social science, and three hours of biological science.

Graduate Study in Chemistry.

The Chemistry Department offers the degree of Master of Science with a major in chemistry. The Chemistry Department in cooperation with the Graduate School and the College of Education also offers an emphasis in chemistry applying toward the Master of Arts degree in education. The regulations for these advanced degrees may be found in the Graduate Catalog.

CHEMISTRY (CHE)

CHE 101. General Chemistry I. **Four hours.** I, II.
Designed for students who will take only one year of chemistry. Basic principles of chemical bonding, structure of matter, chemical equilibrium, and descriptive inorganic chemistry. Three lecture and two laboratory hours.

CHE 102. General Chemistry II. **Five hours.** I, II.
Prerequisite: CHE 101.
Continuation of CHE 101, emphasis on elementary organic chemistry, biochemistry and industrial chemistry. Three lecture, one recitation, and two laboratory hours.

CHE 104. Chemistry for Allied Health Professions. **Four hours.** I, II.
Topics in general, organic, and biological chemistry pertinent to allied health professions. Nature of matter; solutions and acidity; important functional groups of organic chemistry; and carbohydrates, lipids, and proteins and their metabolism. Three lecture and two laboratory hours.

CHE 111. Introductory Chemistry I. **Four hours.** I, II.
First semester of a three-semester sequence designed to prepare the student for further study in chemistry. Topics include nomenclature, structure of matter, stoichiometry, chemical bonding, and chemical change. Three lecture and two laboratory hours.

CHE 112. Introductory Chemistry II. **Five hours.** I, II.
Prerequisite: CHE 111.
Continuation of CHE 111. Coordination compounds, descriptive inorganic chemistry, solution chemistry, and analytical chemistry. Three lecture and four laboratory hours.

CHE 213. Introductory Chemistry III. **Four hours.** I, II.
Prerequisite: CHE 112.
Continuation of CHE 112, emphasis on analytical chemistry, thermodynamics, and kinetics. Three lecture and three laboratory hours.

CHE 361. Organic Chemistry. **Five hours.** I, II.
Prerequisite: CHE 213, or permission of instructor.
Structural theory; hydrocarbons; introduction to stereochemistry; carbonium ion theory; aromatic compounds; applied absorption spectroscopy. Three lecture and six laboratory hours.

CHE 362. Organic Chemistry. **Four hours.** I, II.
Prerequisite: CHE 361.
Organic halides; alcohols and ethers; carboxylic and sulfonic acids; carbonyl compounds; amines and diazonium salts; polyfunctional compounds. Three lecture and three laboratory hours.

CHE 471. Physical Chemistry. **Four hours.** I.
Prerequisite: CHE 213, 361; MAT 213 (or concurrent enrollment); PHY 202.
The thermodynamic properties of physicochemical systems; free energy and equilibria; kinetic theory of gases and reaction rates. Three lecture and three laboratory hours.

CHE 472. Physical Chemistry. **Four hours.** II.
Prerequisite: CHE 471; MAT 213.
Electrochemical processes; electrolytic solutions and activity coefficients; atomic and molecular structure; spectroscopy; partition functions and thermodynamic relations. Three lecture and three laboratory hours.

CHE 480. (Formerly CHE 580.) Seminar. **One hour.** I, II.
Prerequisite: Senior standing.
Presentation of significant developments from recent literature to members of the chemistry faculty and departmental majors. One weekly meeting. May be repeated for a total of two hours credit.

CHE 514. Chemical Literature. **One hour.** A.
Prerequisite: CHE 361, 472.
Introduction to the use of fundamental periodicals, abstract journals, handbooks, review series and encyclopedias of chemistry. One lecture hour.

CHE 520. Advanced Analytical Chemistry. **Three hours.** A.
Prerequisite: CHE 362 and 472.
Advanced study of analytical methods usually classified as non-instrumental. Precipitation studies, aqueous and non-aqueous solvents, titrations, liquid-liquid extractions, chromatography, ion exchange, kinetics in analytical chemistry, sampling, statistics. Two lecture hours, three laboratory hours.

CHE 525. (Formerly CHE 320 and 420.) Instrumental Methods. **Four hours.** A.
Prerequisite: CHE 362 and 472 (or concurrent enrollment).
Principles and uses of optical and electrical instruments in analysis. Colorimetric, spectrophotometric (including infra-red), conductometric, potentiometric, polarographic and chromatographic methods and determinations, methods of nuclear chemistry. Two lecture and six laboratory hours.

CHE 530. (Formerly CHE 313.) Biochemistry. **Four hours.** II.
Prerequisites: CHE 362, 471, or permission of instructor.
Chemistry, metabolism and biosynthesis of carbohydrates, proteins, lipids, and nucleoproteins, the action of vitamins, hormones and enzymes related to cellular metabolism and body processes. Three lecture hours, three laboratory hours.

CHE 545. Chemistry Laboratory and Demonstration Techniques. **Four hours.** A.
Prerequisite: Six semesters of undergraduate work in chemistry or permission of instructor.
Techniques of constructing and demonstrating apparatus to illustrate principles of chemistry. Primarily for high school science teachers. Three lecture and three laboratory hours.

CHE 550. (Formerly CHE 440.) Advanced Inorganic Chemistry. **Three hours.** I.
Prerequisite: CHE 472 (or concurrent enrollment).
Modern concepts of atomic nuclei, atomic structure, and classification of elements. Complex ions and coordination compounds. Theories of bonding. Three lecture hours.

CHE 555. Inorganic Preparation. **Three hours.** II.
Prerequisite: CHE 550.
Techniques of crystallization, distillation, furnace methods, electrolytic processes and gas handling as involved in the synthesis of alloys, oxides, salts, coordination compounds, polyacids, anomalous salts, and colloids. One lecture and six laboratory hours.

CHE 560. Advanced Organic Chemistry. **Three hours.** A.
Prerequisite: CHE 362, 472.
Survey of new reactions and comprehensive study of reaction mechanisms. Three lecture hours.

CHE 565. Qualitative Organic Analysis. **Three hours.** A.
Prerequisite: CHE 362.
Identification of unknown organic substances through a systematic study of their physical and chemical properties and their chemical derivatives. One lecture and six laboratory hours.

CHE 570. (Formerly 470.) Physical Chemistry for the Biological Sciences. **Four hours.** I.
Prerequisite: CHE 213.
Recommended for premedical students and students in the biological sciences or related disciplines. Topics considered: states of matter, colligative properties of solutions, thermodynamics, equilibrium, electro-chemistry, colloids, and reaction kinetics. (Chemistry majors will take Chemistry 471 and 472.) Three lecture and three laboratory hours.

CHE 575. Radiochemistry. **Three hours.** A.
Prerequisite: CHE 471.
The nature and uses of radioactive substances in chemistry. Radiolysis, isotope exchange, radiotracer applications; isotope dilution methods; applications to structural and kinetics studies, including solvent extraction and chromatography. Some demonstration experiments. Three lecture hours.

CHE 595. (Formerly called Research in Chemistry.) Introduction to Research. **Three to five hours. I, II.**

Prerequisite: CHE 361, 471.

Objectives and techniques of chemical research. Problems in all fields of chemistry.

GRADUATE COURSES

CHE 625. Spectroscopy. **Three hours. A.**

Prerequisite: CHE 525 or 472.

The origin of spectra; arc and spark spectra; excitation energies; flame photometry; emission methods; the photographic process; Raman and atomic absorption methods; mass spectroscopy. Two lecture and three laboratory hours.

CHE 626. Electroanalytical Chemistry. **Three hours.** A.

Prerequisite: CHE 525.

Study of the fundamental principles underlying potentiometric measurements and titrations, conductometric titrations, polarographic analysis, amperometric titrations, coulometric titrations, chronopotentiometry, and other electrochemical methods in analytical chemistry. Two lecture and three laboratory hours.

CHE 630. Advanced Biochemistry. **Three hours.** A.

Prerequisite: CHE 530.

Advanced study of metabolic processes and biosynthetic routes. Three lecture hours.

CHE 652. Chemistry of the Transition Elements. **Three hours.** A.

Prerequisite: CHE 550.

A detailed treatment of the chemistry of the transition elements, the lanthanides and actinides, including the structure of coordination complexes, bonding, reaction mechanisms, and preparations. Three lecture hours.

CHE 653. Chemistry of Solutions. **Three hours.** A.

Prerequisite: CHE 550.

Reactions and substances in aqueous and non-aqueous media. Three lecture hours.

CHE 660. Organic Synthetic Methods. **Three hours.** A.

Prerequisite: CHE 560.

Modern synthetic methods with an emphasis upon mechanism. Topics will include oxidation, reduction, Diels-Alder reactions, 1,3-dipolar addition and synthesis using carbene and aryne intermediates. Three lecture hours.

CHE 662. Quantum Organic Chemistry. **Three hours.** A.

Prerequisites: CHE 362 and 472 or permission of instructor.

The basic principles of molecular orbital theory and its application to organic chemistry. Three lecture hours.

CHE 663. Stereochemistry of Organic Compounds. **Three hours.** A.

A study of configurations and conformations of organic molecules and the influence of molecular structure on reactions. Three lecture hours.

CHE 670. Advanced Physical Chemistry. **Three hours.** A.

Prerequisite: CHE 472; MAT 453 recommended.

Introduction to quantum theory; simple quantum mechanical systems; energy levels and statistical mechanics; atomic and molecular structure. Three lecture hours.

CHE 671. Chemical Kinetics. **Three hours.** A.

Prerequisite: CHE 472.

Theory of rate processes; reaction order and molecularity; mechanisms of reaction. Three lecture hours.

CHE 673. Chemical Thermodynamics. **Three hours.** A.

Prerequisites: CHE 472; MAT 453.

Variables and state functions; entropy, enthalpy, and free energy in ideal and non-ideal systems; activity and fugacity; partial molal quantities and chemical potential; thermodynamic properties from spectroscopic data. Three lecture hours.

CHE 680. Graduate Seminar. **One hour.** I, II.
Presentation of significant developments in chemistry to members of the chemistry faculty and department majors. One weekly meeting. May be repeated for a maximum of two hours credit.

CHE 690. Graduate Literature Program. **Three hours.** I, II.
An extensive survey of the literature related to a specific research problem.

CHE 695. Graduate Research. **One to six hours.** I, II.
Laboratory research in one of the major areas of chemistry. May be repeated for a maximum of six credit hours.

SCIENCE (SCI)

SCI 310. History of Science. **Three hours.** I, II.
The development of scientific concepts through the ages; contribution of science to civilization; philosophy of science; biographical sketches. Students may not receive credit for both SCI 310 and BIO 305. Three lecture hours.

DRAMA AND SPEECH (DRA & SPE)

Richard Benson, Chairman; R. Clark, Kelley, Laughlin, Schneider.

The Department of Drama and Speech offers four majors: Speech (teaching or non-teaching), Speech and Drama (teaching or non-teaching), Drama (non-teaching), and Broadcasting (non-teaching).

SPEECH MAJOR (teaching and non-teaching): 30 hours in addition to SPE 100, including SPE 150, 205, 240, 300; 330 or 333 or 335.

SPEECH AND DRAMA MAJOR (teaching and non-teaching): 30 hours in addition to SPE 100, including SPE 150, 205 or 240, 300; DRA 110, 231, 341, 501.

DRAMA MAJOR (non-teaching): 30 hours in addition to SPE 150, including DRA 110, 231, 341, 500, 501; SPE 240 and up to 6 hours of supporting courses in dramatic literature (chosen in consultation with the advisor) may be included as drama electives.

BROADCASTING MAJOR (non-teaching): 30 hours in addition to SPE 100, including JOU 200; SPE 150, 290, 390, 395. Students are encouraged to take a wide range of courses in the social and behavioral sciences.

SPEECH MINOR: 18 hours in addition to SPE 100, including SPE 150, 205 or 240, 300.

SPEECH AND DRAMA MINOR: 18 hours in addition to SPE 100, including SPE 150, 205 or 240, 300; DRA 110, 341.

DRAMA MINOR: 18 hours in addition to SPE 150, including DRA 110, 341, 501.

The curriculum for the junior and senior years should be worked out in consultation with the advisor. The first two years of the curriculum may be found in the Central University College section.

DRAMA (DRA)

DRA 100. (Formerly DRA 222.) Forms and Philosophy of Theatre. **Three hours.** I, II.
Understanding and appreciating the arts of the theatre, development of dramatic forms and practices, consideration of the elements of contemporary theatrical practice. Analysis of plays. Attendance at selected play productions required.

DRA 110. (Formerly DRA 242.) Technical Theatre I. **Three hours.** A.
Problems of technical production dealing with the scenic process: use of materials, methods of construction and handling of scenery, fabrication and construction of properties. Practical experience in the university theatre required.

DRA 211. Technical Theatre II. **Three hours.** A.
Prerequisite: DRA 110.
Emphasis upon participation in planning and executing scenery, lighting and properties for University Theatre productions.

DRA 215. Make-up. **Two hours.** A.
All types of theatrical make-up.

DRA 231. (Formerly DRA 130.) Acting I. **Three hours.** I.
Stage movement, characterization, and projection through exercises in improvisation and pantomime.

DRA 310. Technical Production. **One hour (may be repeated for a total of three hours.)** I, II.
Prerequisite: DRA 110.
Study and practice of technical production through participation in directed departmental activities.

DRA 315. Stage Costume. **Three hours.** A.
Design and execution of theatrical costumes with emphasis on originality, color and line. Attention given to costumes of various periods and styles.

DRA 330. Rehearsal and Performance. **One hour (may be repeated for a total of three hours.)** I, II.
Prerequisite: DRA 231.
Study and practice of acting through participation in directed departmental productions.

DRA 331. (Formerly DRA 230.) Acting II. **Three hours.** II.
Prerequisite: DRA 231.
Continuation of Acting I, culminating in presentation of scenes in class.

DRA 341. (Formerly DRA 440.) Directing I. **Three hours.** A.
Prerequisite: DRA 110, 231.
Basic fundamentals of play direction.

DRA 400. Special Problems in Aesthetics and Criticism of Drama. **One to three hours.** A.
Research proposal must be submitted one semester in advance. Departmental permission required.

DRA 410. Special Problems in Technical Theatre. **One to three hours.** A.
Proposal for project must be submitted one semester in advance. Departmental permission required.

DRA 411. (Formerly DRA 210.) Stage Design. **Three hours.** A.
Prerequisite: DRA 110.
Principles and problems of scenic and lighting design through assignments in various styles and periods; practice in research and techniques of rendering and preparation of working drawings and models; basic theories of stage lighting from a technical and aesthetic viewpoint and practice in planning of light plots for individual plays.

DRA 430. Special Problems in Performance. **One to three hours.** A.
Directed projects in theatrical performance. Departmental permission required.

DRA 441. Directing II. **Three hours.** A.
Prerequisite: DRA 341.
Theory and technique of play direction. Individual directing projects provide for application of principles to specific problems.

DRA 460. (Formerly DRA 545.) Creative Dramatics. **Three hours.** A.
Principles and techniques of leading children in the creation of informal dramatic activities.

DRA 465. (Formerly DRA 540.) Children's Theatre. **Three hours.** A.
Prerequisites: DRA 341.
Principles and practice of play production for children by adults or children.

DRA 500. History of Theatre I. **Three hours.** I.
Intensive examination of development of theatre and drama from the Greeks to the Elizabethans.

DRA 501. History of Theatre II. **Three hours.** II.
Development of drama and theatre from the Elizabethans to the modern period.

DRA 541. Special Problems in Play Direction. **One to three hours.** A.
Prerequisites: DRA 331, 441.
Direction of a studio or major production under faculty guidance. Departmental permission required.

DRA 550. Play Production. **Three hours.** A.
Non-specialized course dealing with the basic elements of play production; selection, casting, rehearsals, types of dramatic literature, styles of acting, elementary principles of set design and decoration, costuming, make-up, lighting, and house management. Primarily for prospective teachers who may direct dramatics. Open to speech and/or drama majors only with the consent of instructor.

DRA 555. Special Problems in Play Production. **One to three hours.** A.
Prerequisite: Departmental permission.
Directed projects in theatrical production.

SPEECH (SPE)

SPE 100. (Formerly SPE 131.) Oral Communication. **Three hours.** I, II.
Principles and practice of oral communication. Study of the process of communication; opportunity to reinforce that study through speaking.

SPE 150. (Formerly SPE 230.) Improvement of Voice and Articulation. **Three hours.** A.
Basic theory of speech production; drills for improvement of voice and articulation; adapted to students' individual speech needs.

SPE 205. Argumentation and Advocacy. **Three hours.** I.
Prerequisite: SPE 100.
Principles and practice of argument in logical discourse with attention to research, evidence, analysis, methods of attack and defense, organization of ideas, and presentation.

SPE 220. Communication in Groups. **Three hours.** II.
Prerequisite: SPE 100.
Principles and practice of group inquiry; investigation and analysis of problems in selected group situations.

SPE 240. (Formerly SPE 341.) Oral Interpretation of Literature I. **Three hours.** I.
Basic techniques of reading aloud; analysis of selections of prose and poetry; practice in reading aloud.

SPE 290. Introduction to Radio and Television. **Three hours.** A.
Survey of the industry. Development of broadcasting; its responsibilities and job opportunities; organization of stations and networks; federal regulation and industry codes; technical aspects of radio and television; brief consideration of programming and production techniques; field trips to area radio and television stations.

SPE 300. (Formerly SPE 231.) Forms of Public Address. **Three hours.** A.
Principles and practice of contemporary forms of public address developed through a study of selected historically significant speeches.

SPE 305. Great Speeches. **Three hours.** A.
A survey of great speeches from ancient times to the present: designed to establish a basis for judgment and appreciation of masterpieces of public speaking; analysis of selected texts.

SPE 315. (Formerly SPE 215.) Forensics. **One hour. (May be repeated for a total of three hours.)** I, II.

Prerequisites: SPE 205 and permission of instructor.

Study and practice of discussion and debate with required participation in intercollegiate forensic activities.

SPE 330. Rhetorical Theory. **Three hours.** A.

Study of selected theories of public address from the classical period to the modern era.

SPE 333. History and Criticism of Public Address: 18th and 19th Century Spokesmen. **Three hours.** A.

Study of selected eighteenth and nineteenth century speakers; critical analysis of selected speech texts.

SPE 335. History and Criticism of Public Address: 20th Century Spokesmen. **Three hours.** A.

Study of selected twentieth century speakers; critical analysis of selected speech texts.

SPE 340. (Formerly SPE 451.) Oral Interpretation of Literature II. **Three hours.** I.

Prerequisite: SPE 240.

Advanced techniques of oral interpretation; attention to individual problems. Final recital program of readings required.

SPE 360. (CL SED 360.) Speech and Language Development. **Three hours.** A.

The normal patterns of speech and language acquisition; application of learning theory and linguistic concepts.

SPE 390. Radio Production. **Three hours.** A.

Prerequisite: SPE 290.

Fundamentals of technical artistic elements of radio production. Practical experience at Radio Station WEKU-FM required.

SPE 393. Radio Practicum. **One hour. (May be repeated for a total of three hours.)** I, II.

Prerequisite: SPE 290 and consent of instructor.

Supervised practical experience on the staff of Radio Station WEKU-FM. Students will participate in the various aspects of radio station operation.

SPE 395. Television Production. **Three hours.** A.

Prerequisite: SPE 290.

A study of the basic elements of television production, including an introduction to writing, producing, directing, and other technical aspects of commercial television. Two hours lecture-discussion and and two hours lab.

SPE 398. Television Practicum. **One hour. (May be repeated for a total of three hours.)** I, II.

Prerequisite: SPE 290 and consent of instructor.

Supervised practical experience on the staff of Eastern Kentucky University Instructional Television; participation in various aspects of television production including camera work, lighting graphics, set design and construction.

SPE 400. Persuasion. **Three hours.** A.

Prerequisite: SPE 100.

Methods of influencing human belief and behavior through communication; special attention to psychological motivation.

SPE 405. Mass Communication and Propaganda. **Three hours.** A.

Prerequisite: SPE 100.

Study of the media of mass communication: press, radio, television, and motion pictures; analysis of techniques of mass communication and propaganda.

SPE 450. (Formerly SPE 550.) Phonetics of the English Language. **Three hours.** A.

Phonetic analysis of contemporary American speech practice in broad and narrow transcription.

SPE 490. Radio and Television Management. **Three hours.** A.
Prerequisite: SPE 290.
A study of the elements basic to successful operation of a radio and television station: staffing, budgeting, types and sources of programs, equipment evaluation and purchase, public relations and promotion, and federal and industry-wide regulatory codes.

SPE 495. Advanced Television Production. **Three hours.** A.
Prerequisite: SPE 395.
A continuation of SPE 395. Advanced study and practice of various aspects of commercial television production. Two hours lecture-discussion and two hours lab.

SPE 560. (Also SED 560.) Introduction to Speech Correction. **Three hours.** A.
Prerequisite: SPE 100.
Designed to help identify and deal with speech defects. Study of basic types of disorders, emphasis on good enviornment for the handicapped and sources of specialized help.

ECONOMICS

The Department of Economics is in the College of Business and the course offerings may be found on p. ——. A student in the College of Arts and Sciences may major or minor in Economics. For a major, he is required to take thirty hours which must include the following courses: ECO 230, 231, 324, 593, 597, and 550 or 492. For a minor, he is required to take eighteen hours which must include the following courses: ECO 230, 231, 324, 593, and 550 or 492.

ENGLISH (ENG)

Kelly Thurman, Chairman; Alexander, Bright, A. Brock, H. Brown, Browning, R. Burkhart, Callender, Carey, Chrisman, Clewett, Coleman, Conrad, Crowder, Culross, Davey, Grise, Hart, Hill, Hopkins, F. Johnson, Kleine, Latta, Long, Lynch, Mangus, Mankin, J. Nelson, Nims, Oldham, Perry, Remaley, Rhodes, Riffe, F. Roberts, Sowders, W. Sutton, Sweet, D. White, I. White, E. Williams, Woodbery.

The following courses are required for a major in English (teaching or non-teaching): GSE 101; 102; ENG 209 or 211; 210 or 212; 301; 350; 351; 411; 539 (540 or 541). In addition, at least 9 hours of restricted English electives are required, selected so that a minimum of one course is taken from each of the following groups, to make a minimum total of 30 hours excluding GSE 101 and 102; Group I (521, 522, 523, 524); Group II (321, 422, 525, 526, 534); Group III (312, 317, 323).

The student must take 12 hours (or equivalent) of a foreign language; HIS 345 or 346 (or equivalent); and SPE 100 or 300.

The student may take a teaching area in English by earning at least 51 semester hours including GSE 101 and 102. In general the student may follow the curriculum for a major, adding at least 15 hours selected in conference with his advisor.

The following courses are required for a minor in English (non-teaching): GSE 101 and 102; ENG 209 or 211; 210 or 212; 301; 350 or 351; 411 and one additional upper division course in literature. The same courses are required for a minor in English (teaching) except that a course in linguistics (ENG 539 or 541) must be taken in lieu of the additional upper division course in literature. A total of 24 semester hours in English is required for a teaching minor.

Curriculum for a major in English (teaching): The first two years of this curriculum may be found in the Central University College section.

Junior	Hours	Senior	Hours
Elective	3-7	ESH 498	4
EDF 317	4-0	ESH 499	10
ENG 301, 350, 411, 351	12	ESH 443	3
Physical Science	6	English Elective	3
English Electives	6-10	ENG 539, 540, or 541	3
		Elective	7
	35		33

MASTER OF ARTS DEGREE IN ENGLISH:

The Master of Arts Degree in English is offered under Option A or Option B. Under either option, work includes both preparation for independent study leading toward the Ph.D. in English and for teaching on the college and pre-college levels. Under either option a student must pass a language reading examination in one foreign language (normally French, German, or Latin) before the Master's degree will be granted; however, the student may instead elect, unless he has already met the requirement, the completion of 12 hours (or the equivalent) of study in at least one language, acceptable to the student's graduate advisory committee. Also, under either option, at least 16 hours must be at the 600 level.

For further information concerning the objectives and areas of course work leading to the M. A. degree in English, admission requirements, the Graduate Record Examination, residence requirements, grade-point average requirement for graduation, comprehensives and orals, and other pertinent matters, see the Graduate Catalog.

MASTER'S DEGREE IN EDUCATION:

The Department of English, in cooperation with the Graduate School and the College of Education, offers an emphasis in English applying toward the M. A. degree in Education. Students obtaining this degree should have a minimum total of 30 graduate hours, 10 of which should be in education and 20 of which should be in English. For further requirements see the Graduate Catalog.

ENGLISH (ENG)

ENG 150. (Formerly English 216.) Introduction to the Short Story. Two hours. I, A.

Readings in the modern short story from its origins to the present; special emphasis on understanding and enjoying short fiction.

ENG 151. Introduction to Dramatic Literature. Two hours. II, A.

Readings in selected classic and modern plays with emphasis on appreciation and interpretation.

ENG 209. Survey of English Literature I. **Three hours.** I, II.
Prerequisite: GSE 101 and 102.
English literature from Beowulf through the 18th Century; emphasis on Chaucer, Spenser, Shakespeare, Donne, Milton, Dryden, Pope, Swift, and Johnson.

ENG 210. Survey of English Literature II. **Three hours.** I, II.
Prerequisite: GSE 101 and 102.
English literature from the Romantics to the present; emphasis on Wordsworth, Keats, Tennyson, Browning, Arnold, Hardy, Yeats, and Joyce.

ENG 211. Survey of World Literature I. **Three hours.** I, II.
Prerequisite: GSE 101 and 102.
Selected readings from masterpieces of world literature from ancient times through the Renaissance.

ENG 212. Survey of World Literature II. **Three hours.** I, II.
Prerequisite: GSE 101 and 102.
Selected readings from Continental, English, and American writers from the 17th Century to the present.

ENG 213. Survey of Biography. **Three hours.** A.
Prerequisite: GSE 101 and 102.
Selected readings in biography from the time of Plutarch to the present.

ENG 214. Introduction to the Novel. **Three hours.** A.
Prerequisite: GSE 101 and 102.
Readings from selected English and American novels.

ENG 215. Introduction to Poetry. **Three hours.** A.
Prerequisite: GSE 101 and 102.
Readings in selected poems with major emphasis on understanding and enjoying poetry; training in the explication of poems.

ENG 301. Advanced Composition and Rhetoric. **Three hours.** I, II.
Prerequisite: GSE 101 and 102.
Study of grammar and rhetoric in relation to expository writing: special attention given to preparing a research paper on a topic related to an appropriate phase of English.

ENG 312. Modern Drama. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of representative Continental, British, and American plays from Ibsen to the present.

ENG 317. The Modern Novel. **Three hours.** A.
Prerequisite: GSE 101, 102, and six hours of literature.
Study of important British and American novels of the 20th Century.

ENG 319. Kentucky Literature. **Three hours.** I, A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of prominent Kentucky writers from the time of statehood to the present; students encouraged to work with the John Wilson Townsend Collection.

ENG 321. The Age of Wordsworth and Keats. **Three hours.** I, A.
Prerequisite: GSE 101, 102, and two courses in literature.
Primary emphasis on the poetry of the Romantic period.

ENG 323. Modern Poetry. **Three hours.** II, A.
Prerequisite: GSE 101, 102, and six hours of literature.
Study of contemporary British and American poets; analysis, interpretation and criticism of modern poetry.

ENG 350. American Literature I. **Three hours.** I, II.
Prerequisite: GSE 101, 102, and two courses in literature.
Survey of American literature from the beginnings to Whitman; emphasis on Cooper, Bryant, Emerson, Poe, Hawthorne, Melville, and Thoreau.

ENG 351. American Literature II. **Three hours.** I, II.
Prerequisite: GSE 101, 102, and two courses in literature.
Survey of American literature from Whitman to the present; emphasis on Whitman, Dickinson, Twain, James, Faulkner, Frost, and Eliot.

ENG 411. Shakespeare. **Three hours.** I, II.

Prerequisite: GSE 101 and 102, and two courses in literature.

Study of Elizabethan England as a background for Shakespeare's works; extensive reading of several plays; intensive reading of selected drama and poetry.

ENG 420. The Local Colorists and the Regional Realists. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Rise of local color and regional realism; survey of the movements from the beginnings to the present in the United States; attention to literature of such regions as Kentucky, the South, and other areas.

ENG 422. Poetry and Prose of the Victorian Period. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Survey of prose and poetry of the Victorian period; reading of selected writers, excluding fiction.

ENG 425. The Old Testament as Literature. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Selected reading in the literature of the Old Testament; emphasis upon its dramatic, lyric, and narrative qualities.

ENG 502. Creative Writing I. **Three hours.** I, A.

Prerequisite: GSE 101, 102, and two other English courses; permission of instructor.

Open to students who desire to have their manuscripts criticized; fiction, drama, poetry, biography, or the informal essay accepted; guest lectures by and discussion with writers-in-residence.

ENG 503. Creative Writing II. **One to three hours.** II, A.

Prerequisite: GSE 101, 102; permission of instructor.

A continuation of ENG 502 but open also to students enrolling for a writer's conference, which is a one-week course of fifteen informal lectures and discussions by faculty and visiting lecturers. Each student registering for the writer's conference must submit a short story, a one-act play, four poems, or the equivalent.

ENG 521. Renaissance Literature. **Three hours.** I, A.

Prerequisite: GSE 101, 102, and two courses in literature.

Study of poetry and prose of the English Renaissance, with emphasis on Sidney, Spenser, and Bacon.

ENG 522. English Poetry and Prose of the Seventeenth Century Exclusive of Milton. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Survey of poetry and prose of the first half of the 17th century, with emphasis on Donne, Jonson, Herbert, Crashaw, Browne, and Burton.

ENG 523. Milton and His Age. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Study of the most important works of Milton; attention to the historical setting and to Milton's contemporaries.

ENG 524. Chaucer. **Three hours.** II, A.

Prerequisite: GSE 101, 102, and two courses in literature.

Intensive reading of such works as **The Canterbury Tales** and **Troilus** and **Criseyde**; other readings as time permits.

ENG 525. The Age of Dryden and Pope. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Poetry, prose, and drama of the Restoration Period with emphasis on Dryden; poetry of the Augustan period with emphasis on Pope.

ENG 526. (Formerly covered in part by ENG 525.) The Age of Johnson. **Three hours.** A.

Prerequisite: GSE 101, 102, and two courses in literature.

Poetry, prose, and drama of the later eighteenth century with emphasis on Johnson and Boswell.

ENG 534. The Nineteenth-Century English Novel. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of the great 19th century English novelists from Jane Austen through Hardy: Austen, Scott, Dickens, the Brontes, Thackeray, Eliot, Meredith, Trollope, and Hardy.

ENG 539. (Formerly covered in part by ENG 540.) Introduction to Linguistic Theory. **Three hours.** I, A.
Prerequisite: GSE 101, 102, and at least six additional hours of English.
Detailed attention to the International Phonetic Alphabet, phonemics, and morphemics. Some attention to structural and transformational methods of analysis. Introduction to the study of dialect.

ENG 540. Applied Grammar and Linguistics. **Three hours.** II, A.
Prerequisite: GSE 101, 102, and six additional hours.
Study of ways in which modern linguistic theory is put into practice. Emphasis on linguistics field work, comparison of languages, and investigation of English as a second language.

ENG 541. History of the English Language. **Three hours.** A.
Prerequisite: GSE 101, 102, and six additional hours.
Study of the history of the English language in terms of social, historical and linguistic forces from which it developed into modern English.

ENG 546. (Formerly ENG 646.) American Novel. **Three hours.** I, A.
Prerequisite: GSE 101, 102, and six additional hours of English.
Survey of the American novel from its beginning to the present.

ENG 547. Age of Emerson. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Intensive study of the prose and poetry of the American Renaissance; emphasis on the writings of Emerson, Thoreau, Hawthorne, Melville, and Whitman.

ENG 550. Realism and Naturalism in American Fiction. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Study of the development of the realistic novel in the 19th century and the rise of naturalism in the twentieth; emphasis upon Howells, James, Garland, Norris, Crane, and Dreiser.

ENG 560. Continental Fiction. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Extensive reading in translation of important fiction of the Western world; emphasis on selected novelists of the 19th and 20th centuries.

ENG 565. Greek and Roman Drama in Translation. **Three hours.** A.
Prerequisite: GSE 101, 102, and two courses in literature.
Brief study of dramatic criticism, theory of tragedy, and the Greek and Roman theater; reading of plays by Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, and Seneca.

ENG 575. Poetry, Prose, Composition. **Nine hours.**
Intensive analysis of poetry and prose; laboratory in composition; demonstrations of recent instructional media. Designed to prepare elementary and secondary teachers for more effective teaching. Administered by the United States Office of Education.

GRADUATE COURSES

ENG 601. Bibliography and Research. **Three hours.** A.
Work in critical theory and practice with attention to bibliography and resources. Each student compiles an extensive bibliography on a subject or author of his or his instructor's choice.

ENG 605. Seminar in the Structure of English. **Three hours.** A.
Examination of various descriptive, transformational, and comparative approaches to the study of language.

ENG 611. English Drama to 1642. **Three hours.** A.
English drama from its beginning in the Middle Ages to the closing of the theaters in 1642, excluding Shakespeare.

ENG 615. Literary Criticism. **Three hours.** II, A.
Study of the development of literary criticism from its beginning to the present.

ENG 625. Old English. **Three hours.** A.
Reading and study of selected works in original Old English dialects.

ENG 626. Middle English Literature. **Three hours.** A.
English literature from 1200 to 1500; emphasis on poetry; readings done primarily in the original dialect.

ENG 627. Seminar in Tudor Literature. **Three hours.** A.
Studies in depth of two or more major poets or prose writers of the period.

ENG 628. Seminar in Donne and Jonson: Poetry and Prose. **Three hours.** A.
Detailed study of the poetry of John Donne and Ben Jonson; some emphasis on 17th century prose.

ENG 630. Studies in the Romantic Period. **Three hours.** A.
Study in depth of selected major figures of the Romantic Period from the pre-romantics and Blake through Wordsworth, Coleridge, Byron, Shelley, and Keats.

ENG 631. Seminar in Nineteenth-Century English Prose. **Three hours.** A.
Studies in depth of two or more major English prose writers (fiction or non-fiction) of the 19th century.

ENG 632. Seminar in the Age of Tennyson and Browning. **Three hours.** I, A.
Primary emphasis on the poetry of Tennyson and Browning; selected readings from other Victorian writers.

ENG 645. Seminar in Whitman and James. **Three hours.** A.
Intensive study in scholarly problems related to the poetry of Whitman and the fiction of James.

ENG 647. Seminar in Hawthorne and Melville. **Three hours.** A.
Intensive study of scholarly problems related to the fiction of Hawthorne and Melville.

ENG 652. Seminar in Faulkner and Hemingway. **Three hours.** A.
Studies in the fiction of Faulkner and Hemingway.

ENG 655. Studies in Twentieth-Century Literature. **Three hours.** A.
Detailed study of selected major figures in poetry, fiction, and drama of the 20th century. Concentration upon British and American literature. May be repeated once.

ENG 660. The Epic. **Three hours.** A.
A study of the epic tradition; readings from Homer, Virgil, Dante, Milton, and others.

ENG 672. Seminar in Eighteenth-Century English Literature. **Three hours.** A.
Studies in depth of two or more major figures of the Augustan Age.

ENG 686. Literary Theory. **Three hours.** A.
Studies in the relationship of imaginative and non-imaginative literature; emphasis on philosophical approaches to English and American Literature.

ENG 690. Special Studies. **One to three hours.** A.
Independent research and writing designed to fulfill the individual needs and interests of advanced students.

ENG 692. Seminar in Shakespeare. **Three hours.** A.
Concentration on selected works of Shakespeare; investigation and research of scholarly problems.

ENG 698. Thesis I. **Three hours.** A.

ENG 699. Thesis II. **Three hours.** A.

JOURNALISM (JOU)

Students majoring in journalism will complete JOU 200, 201, 303 (one hour), 305, 307, 310, 490, MKT 320, and ENG 539 or ENG 541. In addition, at least seven hours of journalism electives are required. A maximum of four hours may be accepted from the following courses in lieu of journalism electives: IED 315, Photography I; SPE 290, Introduction to Radio and Television; ENG 301, Advanced Composition and Rhetoric; ENG 502, Creative Writing I; ENG 503, Creative Writing II.

A journalism major should take twelve hours in a foreign language if he begins the language in college, or six hours if he continues the language at the intermediate level.

Students minoring in journalism will complete JOU 200, 201, 303 (one hour), 310, and ENG 539 or ENG 541. In addition, at least six hours of journalism electives are required for the non-teaching minor and eight hours for the teaching minor.

The teaching minor in journalism is open to those with a first major in art, business education, English, history or physical education.

JOURNALISM (JOU)

JOU 200. Introduction to Mass Communications. **Three hours.** I.

Analysis of the growth and impact of news media upon the social, political, and economic forces in society.

JOU 201. Newswriting. **Three hours.** A.

Prerequisite: GSE 101 and 102.

Study of the elements of news: the lead, style and structure of news stories, news sources, readability, types of stories, and ethics; practice in gathering, writing and evaluation of news.

JOU 303. Journalism Practicum. (May be repeated for a total of 4 hours). **One hour.** I, II.

Prerequisite: GSE 101 and 102.

Instruction and practice in journalism techniques such as reporting, photography, writing and editing a newspaper; organization and procedure in operating a communications reference library with special emphasis given to maintenance of source materials.

JOU 305. Feature writing. **Three hours.** A.

Prerequisite: GSE 101 and 102.

Writing and submitting articles for publication in newspapers, magazines and syndicates; study requirements of periodicals to which sale is attempted and freelancing methods in general.

JOU 307. Editorial Writing. **Three hours.** A.

Prerequisite: JOU 200, 201, 305, or ENG 301.

Study of editorials, editorial columns and editorial pages; practice in writing editorials for publication.

JOU 310. News Editing. **Three hours.** I, II.

Prerequisite: JOU 201.

Study of the purposes and methods of preparing copy for publication. Analysis and practice of headline writing. Evaluation of news, display, and makeup.

JOU 401. Advanced Newswriting. **Three hours.** A.

Prerequisite: JOU 201.

A study of current reporting in specialized fields of state and local government, labor, science, research, and business. Practical experience in covering state and local non-campus news.

JOU 405. Communications Law and Press Freedom. **Three hours.** A.
Prerequisite: JOU 200 and 201.

Consideration of the legal philosophies bearing upon the mass media. Study of news as property and the regulatory provisions of state and federal statutes. Emphasis will be given to the privileges and restraints affecting media.

JOU 475. Public Relations. **Three hours.** A.
Prerequisite: JOU 200 and 201.

Survey of methods of disseminating public information and information intended for internal consumption as practiced by business, industrial, educational, and social organizations. Practice in preparing promotional materials and campaigns.

JOU 490. Senior Press Conference. **One hour.** II.
Prerequisite: Permission of the instructor.

Weekly two-hour press conferences with university, governmental, and other professional representatives in which the relations of the press to other disciplines will be explored. Professional journalists will discuss medial problems and opportunities.

JOU 501. School Publications Supervision Conference. (May be repeated for a maximum of 4 hours). **Two hours.**
Prerequisite: Permission of the instructor.

A two-week course of lectures and discussion by faculty and visiting lecturers. Each student will supervise secondary school students in the production of specimen school publications.

FOREIGN LANGUAGES

C. L. Nelson, Chairman; Bettler, U. Boyd, S. Burkhart, Carter, Charron, Cross, K. Hill, Ingels, Ladd, M. Scorsone, Scruggs, Steanson, Waltenbaugh, Woronin, Yeo.

A student may complete a teaching major in one foreign language by earning 27 semester hours in courses of that language numbered from 200 and above. A student may take a first major in Russian, but without right of teaching certificate. For a major or minor in Russian, a student may include RUS 101, 102 in his total hour requirements.

A two language teaching major-minor combination may be earned in Foreign Languages with 27 hours of one language chosen from courses numbered 200 and above, and at least 18 hours in a second foreign language in courses numbered from 200.

A student who majors in Foreign Languages (non-teaching) will take a minimum of 30 hours in courses numbered from 200 in the chosen language.

A student who wishes to minor in the Department of Foreign Languages will take a minimum of 18 hours in courses of the language numbered from 200 upwards. A total of 21 semester hours in Foreign Languages, which may include 101-102, is required for a teaching minor.

Curriculum for a major in a foreign language (teaching, non-teaching). The first two years of this curriculum may be found in the Central University College section.

Junior Year	**Hours**
Foreign Language	15-18
Minor or electives	9-12
*ENG 210 or 212	3
*EDF 317 or elective	3-4
	30-34

Senior Year	**Hours**
Foreign Language	9-12
Minor or electives	6-9
*ESH 498	4
*ESH 499	10
Foreign Language Methods	3
	32-35

*Non-teaching majors and minors may omit these courses and take 15-18 hours of Foreign Languages and electives to be chosen in consultation with Foreign Language adviser.

GRADUATE PROGRAMS

The Department of Foreign Languages, in cooperation with the Graduate School and the College of Education, offers two programs applying toward the M. A. degree in Education. These consist of an emphasis in French and an emphasis in Spanish. For requirements concerning the M. A. degree in Education with emphasis in French or Spanish see the Graduate Catalog.

FRENCH (FRE)

FRE 101. Elementary French I. **Three hours.** I, II.
Pronounciation; grammar; conversation in French on material studied. Some drill in language laboratory required.

FRE 102. Elementary French II. **Three hours.** I, II.
Prerequisite: FRE 101 or equivalent proficiency.
Continuation of grammar study begun in FRE 101, and oral work based on reading material. Some drill in language laboratory required.

FRE 201. Intermediate French I. **Three hours.** I, II.
Prerequisite: FRE 102 or equivalent proficiency.
Grammar review; controlled conversation; selected readings.

FRE 202. Intermediate French II. **Three hours.** I, II.
Prerequisite: FRE 201.
Emphasis on reading and writing French.

FRE 206. (Formerly FRE 407.) Intermediate Conversation. **Three hours.** I, II.
Prerequisite: FRE 202 or equivalent proficiency.
Required of all majors and minors. (Waived in case of demonstrable oral proficiency but not open to native speakers.)

FRE 303. Introduction to French Literature I. **Three hours.** I.
Prerequisite: FRE 202 or equivalent proficiency.
Survey of nineteenth and twentieth century French literature. Required of all majors.

FRE 304. Introduction to French Literature II. **Three hours.** II.
Prerequisite: FRE 202 or equivalent proficiency.
A survey of major works of French literature from Middle Ages through the eighteenth century. Required of all majors.

FRE 307. The Nineteenth Century Novel. **Three hours.** A.
Prerequisite: FRE 303-304.
Selected complete novels from such writers as Chateaubriand, Hugo, Balzac, Flaubert, Zola.

FRE 308. Nineteenth Century Poetry and Drama. **Three hours.** II.
Prerequisite: FRE 303-304.
Musset, Vigny, Lamartine, Hugo, Baudelaire, de Lisle, Verlaine, Rimbaud and Mallarme.

FRE 311. The Age of Classicism. **Three hours.** I.
Prerequisite: FRE 303-304.
Selected works from such writers as Descartes, Pascal, Corneille, Scarron, Moliere, Racine and La Fontaine.

FRE 312. The Age of Englightenment. **Three hours.** II.
Prerequisite: FRE 303-304.
Selected works of Le Sage, Montesquieu, Voltaire, Prevost, Diderot, Rousseau and Beaumarchais.

FRE 380. Culture and Civilization. **Three hours.** I and II.
Prerequisite: FRE 206 or equivalent proficiency.
Broad survey of French culture and civilization for the French major.

FRE 411. Contemporary French Literature. **Three hours.** A.
Prerequisite: FRE 303-304.
Gide, Apollinaire, Valery. Malraux, Cocteau, Giraudoux, Sartre, Anouilh, Ionesco.

FRE 495. Independent Work in French. **One to three hours.** I, II.
Prerequisite: Consent of the Department.
May be repeated once.

FRE 505. (Formerly FRE 405). Advanced Grammar and Composition. **Three hours.** I, II.
Prerequisite: FRE 202 or equivalent proficiency.

FRE 511. Twentieth-Century French Novel. **Three hours.** A.
Prerequisite: FRE 303 or equivalent.
Extensive readings from the works of contemporary French novelists.

FRE 535. (Formerly FRE 399.) Introduction to French linguistics. **Three hours.** II.
Applied linguistics for the prospective teacher of French.

FRE 540. Advanced French Conversation. **Three hours.** I, II.
Prerequisite: FRE 206 or equivalent proficiency.

FRE 563. Laboratory Techniques in Foreign Language Teaching. **Two hours,** I, II.
Advanced methods in the coordination of electronic teaching devices to the total foreign language program.

FRE 570. Sixteenth-Century French Literature. **Three hours.** A.
Prerequisite: FRE 304 or equivalent.
A survey of the major works of the Renaissance, with emphasis on those of Rabelais, Montaigne and Ronsard.

GRADUATE COURSES

FRE 620. The Classical Drama of the Seventeenth-Century. **Three hours.** A.
A detailed study of the principal plays of Moliere and Racine.

FRE 630. Post-Romantic Poetry of the Nineteenth Century. **Three hours.** A.
Intensive analysis of the works of Baudelaire and the symbolist poets.

FRE 640. The Contemporary French Theatre. **Three hours.** A.
An in-depth study of one or more of the following dramatists: Giraudoux, Cocteau, Anouilh, Ionesco, Camus, Sartre, Beckett.

FRE 650. History of the French language. **Three hours.** A.
A survey of the evolution of the French Language from its origins to the present day.

FRE 660. Medieval French Literature. **Three hours.** A.
A survey of the French literature of the Middle Ages through the fifteenth century. Readings in Modern French translation where needed.

FRE 680. Special Studies. **One to three hours.** A.
Independent study in either language or literature on a subject of special need or interest to the advanced student.

GERMAN (GER)

GER 101. Elementary German I. **Three hours.** I, II.
Essentials of grammar with practice in pronunciation, reading, writing, and some conversation. Some drill in language laboratory required.

GER 102. Elementary German II. **Three hours.** I, II.
Prerequisite: GER 101 or equivalent proficiency.
Continuation of GER 101 with more advanced exercises in reading, writing, and comprehension of spoken German. Some drill in language laboratory required.

GER 201. Intermediate German I. **Three hours.** I, II.
Prerequisite: GER 102 or equivalent proficiency.
Continuation of the eleventary course on a more advanced level.

GER 202. Intermediate German II. **Three hours.** I, II.
Prerequisite: GER 201 or equivalent proficiency.
Continuation of 201.
Certain selected texts are read with emphasis on translation and grammar.

GER 203. Scientific German. **Three hours.** I and II.
Prerequisite: GER 201 or equivalent proficiency.
Alternate course for GER 202. Certain selected scientific texts are read with emphasis on translation and grammar. Recommended for science majors.

GER 206. (Formerly GER 407.) Intermediate Conversation. **Three hours.** I and II.
Prerequisite: GER 202 or equivalent proficiency.
Required of all majors and minors. (Waived in case of demonstrated oral proficiency but not open to native speakers.)

GER 303. Introduction to German Literature I. **Three hours.** I.
Prerequisite: GER 202 or equivalent proficiency.
A survey of major works of German Literature from the beginning to the seventeenth century. Required of all majors.

GER 304. Introduction to German Literature II. **Three hours.** II.
Prerequisite: GER 202 or equivalent proficiency.
Survey of German literature from the seventeenth century to the present time. Required of all majors.

GER 305. Main Themes of German Literatuure I. **Three hours.** I.
Prerequisite: GER 202.
Special attention to dramas which best reflect the main currents in each period. Dramas by Lessing, Goethe, Kleist, Grillparzer, and Hebbel.

GER 306. Main Themes of German Literature II. **Three hours.** II.
Prerequisite: GER 202.
Continuation of GER 305.
Emphasis on the works of Hauptmann, Schnitzler, Kaiser, Brecht, Frisch, Durrenmatt, and Grass.

GER 380. Culture and Civilization. **Three hours.** I and II.
Taught in English with an English textbook. Broad survey of German culture and civilization. Special conditions for the German major and minor.

GER 411. Contemporary German Literature. **Three hours.** A.
Prerequisite: GER 303-304.
The works of writers, such as Grass, Johnson, Boll, Durrenmatt, and Frisch are read and discussed.

GER 495. Independent Work in German. **One to three hours.** I, II.
Prerequisite: Consent of the Department.
May be repeated once.

GER 505. (Formerly GER 405.) Advanced Grammar and Composition. **Three hours.** I, II.
Prerequisite: GER 202 or equivalent proficiency.

GER 511. Twentieth-century German Novel. **Three hours.** A.
Prerequiste: GER 303 and GER 304 or equivalent proficiency.
In-depth study of one or more of the following novelists: Thomas Mann, Heimito von Doderer, Robert Musil, Hermann Broch.

GER 531. Survey of German Poetry. **Three hours.** A.
Designed to acquaint students with the characteristics of German prosody and to instruct them in the techniques of explication.

GER 540. (Formerly GER 406.) Advanced Conversation. **Three hours.** A.
Prerequisite: GER 206 or equivalent.
A conversation course for seniors or graduate students who need practice in speaking and understanding German. (Not open to native speakers.)

GER 550. Brecht's Drama. **Three hours.** A.
Intensive study of works of one man to prepare students for advanced work and research on their own. Emphasis on Brecht's philosophical development as evidenced in his dramas.

GER 570. Romanticism. **Three hours.** A.
A study of its philosophical basis, its themes and forms. Included among the authors are: Schlegel, Novalis, Tieck, etc.

GREEK (GRE)

GRE 101. Elementary Greek I. **Three hours.** I.
Introduction to the grammar of classical Greek and the Koine Greek of the New Testament and to the reading of elementary texts. Recommended for students majoring in languages, ancient history, and Bible.

GRE 102. Elementary Greek II. **Three hours.** II.
Continuation of GRE 101 with more advanced work in grammar and syntax and the reading of Xenophon's Anabasis.

RUSSIAN (RUS)

RUS 101. Elementary Russian. **Three hours.** I.
Elements of the language studied through grammar, pattern practice, drills, reading, and conversation. Some drill in language laboratory required.

RUS 102. Elementary Russian II. **Three hours.** II.
Prerequisite: RUS 101 or equivalent proficiency.
Continuation of RUS 101.
Some drill in language laboratory required.

RUS 201. Intermediate Russian I. **Three hours.** I.
Prerequisite: RUS 102 or equivalent proficiency.
Continuation of Russian grammar; emphasis on vocabulary building and conversation. Reading selections from Russian prose, poetry, and politics (newspaper and magazines). Oral reports and discussion of texts.

RUS 202. Intermediate Russian II. **Three hours.** II.
Prerequisite: RUS 201 or equivalent proficiency.
Continuation of RUS 201.

RUS 206. Intermediate Conversation. **Three hours.** II.
Designed to be taken simultaneously with RUS 202, with permission of instructor. One hour of laboratory per week. (Waived in case of demonstrable oral proficiency but not open to native speakers.)

RUS 303. Survey of Russian Literature I. **Three hours.** I.
Prerequisite: RUS 202 or equivalent proficiency.
Selected readings from Pushkin, Gogol, Turgenev, Chekhov, and others. Assigned reading in English on Russian history, culture, and civilization.

RUS 304. Survey of Russian Literature II. **Three hours. II.**
Prerequisite: RUS 202 or equivalent proficiency.
Readings from the time of Tolstoy and Dostoevsky to the present.

RUS 380. Culture and Civilization. **Three hours.** I and II.
Prerequisite: RUS 202.
Broad survey of the development of Russian culture and civilization.

RUS 405. Advanced Composition. **Three hours.** A.
Prerequisite: RUS 202 or equivalent proficiency.
Morphology and syntax of Russian grammar. Study of composition and stylistics.

RUS 495. (Formerly RUS 395.) Independent Work in Russian. **One to three hours.** I, II.
Prerequisite: Consent of the Department.
May be repeated once.

LATIN (LAT)

LAT 101. Elementary Latin I. **Three hours.** I.
Pronunciation; declension of nouns, adjectives, and pronouns; indicatives; infinitives; simple uses of subjunctive verbs; acquisition of the fundamental principles of the language; ability to read simple Latin prose dealing with Roman home life, mythology, and Roman history.

LAT 102. Elementary Latin II. **Three hours.** A.
Prerequisite: One unit of high school Latin or LAT 101.
Caesar and a wide range of other authors; vocabulary; inflection, syntax, and their application to English; collateral reading on Roman history and society; training in the understanding of Latin in the Latin order.

LAT 201. Selections from Cicero and Ovid. **Three hours.** A.
Prerequisite: Two units of high school Latin or LAT 102.
Selections from the works of Cicero, Ovid, Pliny, and others; continued emphasis on mastery of vocabulary and syntax; emphasis on the relation of Latin to English; comparison of the government of the Roman Republic to that of democracies of the present day.

LAT 202. Selections from Vergil's Aeneid. **Three hours.** A.
Prerequisite: Two or three units of high school Latin or LAT 201.
Selections from Aeneid of Vergil; study of the Augustan age; study of metrical form and structure of the poem; continued emphasis on Latin inflection and constructions.

LAT 301. Selections from Livy. **Three hours.** A.
Prerequisite: Three units of high school Latin or equivalent.
Survey of Roman history from the foundation of Rome to the close of the second Punic War; assigned readings from such historians as Mommsen, Heitland, and others; comparative study of Rome and Carthage; critical study of Livy's style.

LAT 302. Selections from Horace. **Three hours.** A.
Prerequisite: Three units of high school Latin or equivalent.
Selected odes, epodes, and satires from Horace; study of Augustan Age from both a literary and political point of view; study of Horace's philosophy; various meters employed by Horace.

LAT 303. The Writing of Latin Prose. **Three hours.** A.
Prerequisite: LAT 301 or equivalent proficiency.
Selections from the text, "Arnold's Latin Prose"; review of syntax, sight reading.

LAT 304. The Latin Dramatists. **Three hours.** A.
Prerequisite: LAT 301 or equivalent proficiency.
Dramas of Plautus, Terence, and Seneca; two plays of Plautus for intensive study; rapid reading of other representative plays.

LAT 401. Latin Prose of the Silver Age. **Three hours.** A.
Prerequisite: LAT 302 or equivalent proficiency.
Letters of Pliny the Younger; selections from the writings of Tacitus.

LAT 402. Satire and Epigram. **Three hours.** A.
Selected satires of Juvenal; selected epigrams of Martial; development of satire in Latin literature, with assignments from Horace; satire in English; epigram as a literary expression.

LAT 495. Independent Work in Latin. **One to three hours.** I, II.
Prerequisite: Consent of the Department.
May be repeated once.

LAT 503. (Formerly LAT 403.) Latin Literature of the Early Empire. **Three hours.** A.
Prerequisite: LAT 302 or equivalent proficiency.
Selections from a connected and contemporaneous discussion of politics, education, literature, philosophy, social types, and town and country life.

LAT 504. (Formerly LAT 404.) Latin Literature of the Late Republic. **Three hours.** A.
Prerequisite: LAT 302 or equivalent proficiency.
Selections from the works of Caesar, Sallust, Nepos, and Cicero, with emphasis on Ciceronian prose as a basis of much of the thinking and writing since his day; selections from works of poets of this age, with emphasis on the works of Catullus and Lucretius.

LAT 505. (Formerly LAT 405.) Roman Private Life. **Three hours.** A.
Lectures, discussions, and readings on Roman family, home, marriage, education, clothing, food, amusements, travel, religion, town, and country life.

SPANISH (SPA)

SPA 101. Elementary Spanish I. **Three hours.** I, II.
Grammar; pronunciation; reading of basic Spanish. Some drill in language laboratory required.

SPA 102. Elementary Spanish II. **Three hours.** I, II.
Prerequisite: SPA 101 or equivalent proficiency.
Continuation of SPA 101. Some drill in language laboratory required.

SPA 201. Intermediate Spanish I. **Three hours.** I, II.
Prerequisite: SPA 102 or equivalent proficiency.
Review of grammar. Selected materials about Spain and Latin America. Representative short stories of authors throughout the Spanish-speaking world.

SPA 202. Intermediate Spanish II. **Three hours.** I, II.
Prerequisite: SPA 201 or equivalent proficiency.
Continuation of SPA 201.

SPA 206. (Formerly SPA 407.) Intermediate Conversation. **Three hours.** I, II.
Prerequisite: SPA 202 or equivalent proficiency.
Required for all majors and minors. (Waived in case of demonstrable oral proficiency but not open to native speakers.)

SPA 303. Introduction to Spanish Literature I. **Three hours.** I.
Prerequisite: SPA 202 or equivalent proficiency.
Middle Ages through the Eighteenth Century. Required of all majors.

SPA 304. Introduction to Spanish Literature II. **Three hours.** II.
Prerequisite: SPA 202 or equivalent proficiency.
Nineteenth and twentieth centuries. Required of all majors.

SPA 380. Culture and Civilization. **Three hours.** I and II.
Prerequisite: SPA 202 or equivalent proficiency.
Broad survey of the development of Spain and Latin America.

SPA 412. Seminar. Special Problems of Spanish Literature. **Three hours.** A.
Members of the staff. Open to senior majors with permission of Chairman.

SPA 414. Seminar. Special Problems of the Spanish Language. **Three hours.** A.
Members of the staff. Open to senior majors with permission of Chairman.

SPA 495. Independent Work in Spanish. **One to three hours.** I, II.
Prerequisite: Consent of the Department.
May be repeated once.

SPA 509. (Formerly SPA 309.) Spanish Prose. **Three hours.** I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish prose from the Middle Ages through the Eighteenth-century.

SPA 510. (Formerly SPA 310.) Spanish Prose. **Three hours.** II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish prose of the nineteenth and twentieth centuries.

SPA 535. (Formerly SPA 399.) Linguistics. **Three hours.** I, II.
Prerequisite: SPA 303-304 or equivalent.
Introduction to linguistics for the Spanish major.

SPA 505. (Formerly SPA 405.) Advanced Composition. **Three hours.** I.
Prerequisite: Senior status or graduate status.

SPA 507. (Formerly SPA 407.) Spanish Drama. **Three hours.** I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish Drama from the Middle Ages through the seventeenth century.

SPA 508. (Formerly SPA 408.) Spanish Drama. **Three hours.** II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish drama of the eighteenth, nineteenth and twentieth centuries.

SPA 511. (Formerly SPA 409.) Spanish Poetry. **Three hours.** I.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish poetry from its beginnings through the seventeenth century.

SPA 512. (Formerly SPA 410.) Spanish Poetry. **Three hours.** II.
Prerequisite: SPA 303 and 304 or equivalent.
Intensive study of Spanish poetry of the eighteenth, nineteenth and twentieth centuries.

SPA 540. Advanced Spanish Conversation. **Three hours.** II.
Prerequisite: SPA 206 or equivalent.

SPA 563. Laboratory Techniques in Foreign Language Teaching. (Same as FRE 563.) **Two hours.** A.
Advanced methods in the coordination of electronic teaching devices to the total foreign language program.

GRADUATE COURSES

SPA 620. Medieval Spanish Literature. **Three hours.** A.
Spanish Literature to 1492.

SPA 625. Golden Age Prose. **Three hours.** A.
Representative works and authors of the sixteenth and seventeenth centuries with an emphasis on Cervantes.

SPA 630. Golden Age Drama. **Three hours.** A.
Representative works and authors of the sixteenth and seventeenth centuries with an emphasis on Lope, Tirso, Calderon and Alarcon.

SPA 635. Nineteenth-century Prose. **Three hours. A.**
Representative works and authors with an emphasis on the development of the realistic novel.

SPA 650. History of the Spanish Language. **Three hours. A.**
The evolution of the Spanish language from its origins to modern Spanish.

SPA 680. Special Studies. **One to three hours. A.**
Independent study in either language or literature on a subject of special need or interest to the advanced student.

GEOGRAPHY (GEO)

J. R. Schwendeman, Jr., Chairman; Adams, Bladen, Lathrop, Marionneaux, Monsebroten, Quillen, J. Schwendeman, Sr., Sebor, Walker.

UNDERGRADUATE PROGRAMS

The Department offers three major programs; a major in geography (teaching), a major in geography (non-teaching), and a degree in regional planning. The non-teaching and planning programs are directed towards students pursuing the geography/planning discipline as a profession. The required semester hours for the geography degrees vary between 51 and 58 including a minor program, while the composite program in planning totals 60 semester hours.

A minor program in geography is offered. A minor with right of teaching will constitute 21 hours and a non-teaching minor requires 18 hours.

Students considering geography as a profession are strongly encouraged to take two years of German, French, or Russian.

Curriculum For a Major in Geography (Teaching)

GEO 210, 216, 220, 402, 330, 331, 340, 421 or 422, 442, plus a 3 hour geography elective, and GLY 108 are required for satisfactory completion of this major.

The first two years of this curriculum may be found in the Central University College section.

Junior	Hours	Senior	Hours
EDF 317	4	ESH 498, 499	14
MUS 271	3	ESH 449	3
GEO 330, 331, 340, 402, 421 or 422, and 442	18	ELE 501 and a Geography elective	6
Electives or Minor	8	Electives or Minor	10
	33		33

The second major or minor must be approved by the Chairman of the Department of Geography and the Chairman of the Department of Secondary and Higher Education.

Curriculum For a Major in Geography (Non-teaching)

The major may pursue either a Physical or Cultural-Economic Orientation. The course requirements for these two orientations, referred to as Plan A and Plan B, follow. The first two years of this curriculum may be found in the Central University section.

Plan A: Courses required for the Physical Orientation are GEO 210, 215, 216, 220, 313, 330, 340, 355, 421 or 422, 442, 499, 553, 3 hours of electives in geography, GLY 210, and a course in algebra.

Junior	Hours	Senior	Hours
MUS 271	3	GEO 442, 499, 553	8
MAT 107 or 109	3–5	GEO electives	3–6
GEO 313, 331, 340, 355, 421 or 422	15	Electives or Minor	18-21
Electives or Minor	9		
	30–32		29-35

Plan B: Courses required for the Cultural-Economic Orientation are GEO 210, 216, 220, 330, 331, 340, 355, 421, 422, 442, 499, 553, 3 hours of electives in geography, GLY 210, and algebra.

Junior	Hours	Senior	Hours
MUS 271	3	GEO 421, 442, 499, 553	11
MAT 107 or 109	3–5	Electives or Minor	18
GEO 330, 331, 340, 355, 422	15		
GEO electives	3		
Electives or Minor	6		
	30–32		29

The minor program will be determined in counsel with the student's advisor.

Curriculum for a Major in Regional Planning (Non-teaching)

Candidates for a Bachelor's degree in Regional Planning must complete 60 hours in planning and related disciplines. In addition, certain other supporting courses will be recommended to majors. Specifically, the 60 required hours include PLA 220, 221, 362, 490; GEO 331, 355, 421, 553; INT 191; ECO 230, 231; POL 101, 320, 362; SOC 231, 332, 360, 465; GLY 390, 410. These reflect a composite, integrated program, rather than a major and minor combination. The last two years of the suggested curriculum appear below. The first two years of this program may be found in the Central University section of the catalog.

Junior	Hours	Senior	Hours
GLY 390	3	PLA 490	3
MAT 107, 207	6	GEO 553, 421	6
GEO 331, 355	6	GLY 410	3
POL 305, 320	6	SOC 465	3
SOC 332, 360	6	Electives	15
PLA 362	3		
ECO 231	3		
	33		30

Minor Program in Geography

A teaching minor requires 21 semester hours; a non-teaching minor requires 18 semester hours.

Geography Minor: GEO 210, 216, 220, 330 or 331, plus six or nine upper division hours of geography electives, dependent upon type of minor.

GRADUATE PROGRAMS

The Geography Department offers three advanced degree programs in Geography: Master of Arts with thesis, Master of Arts without thesis, and Master of Arts in Education with emphasis in Secondary Education—Geography. Information pertaining to these graduate degrees may be found in the appropriate sections of the Graduate Bulletin.

REGIONAL PLANNING (PLA)

PLA 220. Planning Theories. **Three hours.** I.
An introduction to the basic goals of urban, regional, state, and national planning as a profession; its philosophy, methodology, and vocabulary; the relation between planning and the other disciplines.

PLA 221. Urban Design. **Three hours.** II.
Prerequisite: PLA 220 or departmental approval.
An introduction to the study of the relationship between the Man and his environment, with an emphasis on development of design, on understanding of the design process, and on space-time considerations. The design of new towns with an emphasis on the cultural and historical determinants; the redesign of a section of a large city or a whole of a small city. Synthesizing basic research, program definition, policy determination, programming. Two hours lecture and two hours laboratory.

PLA 362. Legal Aspects of Planning. **Three hours.** II.
Prerequisite: PLA 220 or departmental approval.
Planning legislature, procedures, client contracts, organization of planning on the municipal, county, state, national, private, and corporate level. Three hours lecture.

PLA 490. Planning Seminar. **Three hours.** A.
Prerequisite: Departmental permission.
Discussion of the past, current, and future trends in the United States and abroad; selected topics. Students may take this course for a maximum of six credit hours.

GEOGRAPHY (GEO)

(Departmental approval in lieu of course prerequisite is dependent upon an equivalent background.)

GEO 101. Principles of Geography I. **Three hours.** I, II, S.
Study of the physical environment of man, including space relation, weather and climate, soils, vegetation, landforms and resources.

GEO 102. Principles of Geography II. **Three hours.** I, II, S.
World Geography designed for general knowledge, including essential characteristics and significant problems of the major regions and cultures of the world.

GEO 210. Physical Geography. **Three hours.** I, II.
Prerequisite: Departmental majors or departmental approval.
Intensive study of space relations, maps and mapping, weather and climate, soils, vegetation, and resources. Required of all departmental majors. Two hours lecture and two hours laboratory.

GEO 215. Meteorology. **Three hours.** I.
Prerequisite: GEO 210 or departmental approval.
Elements and physical processes in the atmosphere, air masses and associated weather, frontogenesis and associated weather, and introduction to forecasting. Two hours lecture and two hours laboratory.

GEO 216. Climatology. **Three hours.** II.
Prerequisite: GEO 210 or departmental approval.
Elements of weather and climate, methods of climate classification, distribution and characteristics of climatic types. Two hours lecture and two hours laboratory.

GEO 220. Cultural Geography. **Three hours.** II.
Prerequisite: GEO 210 or departmental approval.
Introduction to basic concepts of cultural geography, emphasis on analysis of various culture elements and reasons for their regional character and variations.

GEO 300. Geography (..................................). **One to nine hours.** A.
A geography course designed for undergraduate institute participants. Course content will be developed to adequately serve the aims of the Institute, and the specific orientation will appear in parenthesis behind the course title; that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 301. Aviation Meteorology. **Three hours.** II.
Study of the elements of weather, air masses, stability, fronts, upper air characteristics, flight hazards and combative procedures. Analysis and understanding of Weather Bureau information for flight planning and cross sectional diagramming. Designed primarily for those interested in aviation as a career or as a valuable aid in another profession.

GEO 313. Geomorphology. **Three hours.** I.
Prerequisite: GEO 216 or departmental approval.
Study of the surface features of the earth, their form, nature, origin, and stage of development. Two lecture hours and two laboratory hours.

GEO 330. Economic Geography I. **Three hours.** I.
Prerequisite: GEO 220 or departmental approval.
Description and analysis of the world pattern of major resources with consideration to their origin, development, and use. Major emphasis is on the primary activities of agriculture, forestry, fishing, and mining, and their regional variations and characteristics.

GEO 331. Economic Geography II. **Three hours.** II.
Prerequisite: GEO 220 or departmental approval.
Description and analysis of secondary and tertiary economic systems and functions. The major topics are related to origin, development, transportation, and distribution of goods and services, manufacturing, trade centers, and area-economic organization, supplemented with case studies.

GEO 340. Approach to Regional Geography. **Three hours.** I.
Prerequisite: GEO 220.
Techniques of approach in regional studies, including micro and macro areas, along with case studies.

GEO 341. (Formerly GEO 541.) Geography of Latin America. **Three hours.** I of alternate years.
Prerequisite: General, none; geography majors, GEO 340.
Physical, cultural, and economic geography of Latin America, with emphasis on underdeveloped areas or areas of current political concern.

GEO 342. (Formerly GEO 573, 542.) Geography of Asia. **Three hours.** II of alternate years.
Prerequisite: General, none; geography majors, GEO 340.
Physical, cultural, and economic geography of Asia, with emphasis on areas of current concern.

GEO 343. (Formerly GEO 575, 543.) Geography of Africa. **Three hours.** II of alternate years.
Prerequisite: General, none; geography majors, GEO 340.
Physical, cultural, and economic geography of Africa, with emphasis on areas of current concern.

GEO 345. Regions and Nations of the World I. **Three hours.** I.
A survey of the importance, geographic characteristics, and the major problems of the Eurasian and Australian continents and Pacific islands. Geography majors and **minors may not take this course.**

GEO 346. Regions and Nations of the World II. **Three hours.** II.
A survey of the importance, geographic characteristics, and the major problems of the Americas and Africa. Geography majors and minors may not take this course.

GEO 355. Cartography. **Three hours.** I.
Map projections, construction, and representation of data on maps and charts. One hour lecture, four hours laboratory.

GEO 358. Mapping Techniques. **Two hours.** I.
Techniques of field mapping including the use of the telescopic alidade and plane table. Emphasis is given to practical application and to instrument familiarization. One hour lecture, two hours laboratory.

GEO 402. Conservation of National Resources. **Three hours.** II, S.
Conservation of physical, cultural, and human resources of nations, including history of conservation, current conservation practices and laws, and the future direction of conservation.

GEO 421. Urban Geography. **Three hours.** II.
Prerequisite: General, none; Geography majors, GEO 340.
Study of city function, patterns, and past and current problems confronting the city, including the problems of planning, zoning, community housing, shopping centers, and urban renewal.

GEO 422. Political Geography. **Three hours.** II, S.
Prerequisite: General, none; Geography majors, GEO 340.
Study of the development of political geography and geopolitics, conditions influencing political structures through time, with special attention to areas of current major international concern.

GEO 440. Geography of Kentucky. **Three hours.** I, S.
Prerequisite: General, none; Geography majors, GEO 340.
Physical, cultural, and economic geography of the State of Kentucky; special emphasis in physical and human resources, problems confronting the State, future of the State.

GEO 441. Geography of the South. **Two hours.** II, alternate summers.
Prerequisite: General, none; Geography majors, GEO 340.
Study of the physical, cultural, and economic geography of Southeastern United States with special emphasis on physical and human resources, current problem of this region, and the future of this region.

GEO 442. Geography of Anglo-America. **Three hours.** I, alternate summers.
Prerequisite: General, none; Geography majors, GEO 340.
Study of the physical, cultural, and economic geography of Anglo-America with special emphasis on physical and human resources, current problems of this region, and the future of this region.

GEO 445. (Formerly GEO 540.) Geography of Europe. **Three hours.** I of alternate years.
Prerequisite: General, none; Geography majors, GEO 340.
Physical, cultural and economic geography of Europe, with emphasis on problem areas or areas of current interest.

GEO 498. Independent Study. **One to three hours.** I, II, S.
Prerequisite: Departmental major with a senior standing.
Research topic to be selected in counsel with student's advisor.

GEO 499. Senior Thesis. **Two hours.** I, II, S.
Required of all Geography majors (non-teaching).

GEO 500. Geography (..............................). **One to nine hours.** A.
A geography course designed for undergraduate and graduate institute participants. Course content will be developed to adequately serve the aims of the Institute, and the specific orientation will appear in parenthesis behind the course title; that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 513. Physiography of Eastern United States. **Three hours.** I of alternate years.
Prerequisite: GEO 313.

Detailed study of the physiographic regions and features of Eastern United States. Two hours lecture and two hours laboratory.

GEO 514. Physiography of the Western United States. **Three hours.** II of alternate years.
Prerequisite: GEO 313.

Intensive study of the physiographic regions and features of Western United States. Two hours lecture and two hours laboratory.

GEO 516. Advanced Climatology. **Three hours.** I.
Prerequisite: GEO 216.

Current methods utilized in climatic studies of micro and macro areas, alternate climatological classification systems, and techniques employed in data collection, processing, and presentation.

GEO 530. Advanced Economic Geography. **Three hours.** II.
Prerequisite: GEO 330 and 331, or departmental approval.

Distribution and characteristics of various kinds of economic systems, and cultural and physical bases accounting for economic differentiation. Included are origin, development, and transformation of systems, comparative advantages and techniques for independent analysis. Research paper required.

GEO 546. Regional Geography. **Three hours.** A.
Prerequisite: General, none; geography majors, GEO 340.

Intensive study of a selected area of less than continental size. Offered upon demand and by an instructor who has done extensive research in the selected region, or by a visiting lecturer. May be taken for a maximum of six hours. Research paper required.

GEO 553. Quantitative Applications in Research. **Three hours.** II.
Prerequisite: Elementary statistics course.

Study of data type normally encountered in social and earth science research, valid sampling techniques in regard to development of this data, analysis of samples by appropriate statistical methods, testing for validity and significance, and conclusion drawn. Two hours lecture and two hours laboratory.

GEO 555. Advanced Cartography. **Three hours.** II.
Prerequisite: GEO 355 or departmental approval.

Advanced techniques of cartographic presentation of data and use of aerial photographs in map construction. One hour lecture and four hours laboratory.

GEO 556. Remote Sensing. **Three hours.** II, A.
Prerequisite: Departmental approval.

The mechanics and limitations inherent to remote sensing imagery, and the interpretation and use of this data in geographic research.

GRADUATE COURSES

GEO 600. Geography (.......................................). **One to nine hours.** A.

A geography course designed for graduate institute participants. Course content will be developed to adequately serve the aims of the Institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Regional, Education, etc. The designated semester hours which can be earned will also be specified for a given institute.

GEO 610. Seminar in Physical Geography. **Three hours.** I.
Prerequisite: Adequate background in physical geography as determined by department.

Seminar in some aspect of physical geography dictated by student interest, faculty specialty, or current problems in the field.

GEO 613. Research in Geomorphology. **Three hours.** II and alternate summers.
Prerequisite: Geography 313.
Directed research in selected geomorphological problems, such as hydrologic anomalies, sedimentation rates, quantitative geomorphology, and glacial studies.

GEO 616. Research in Climatology. **Three hours.** II and alternate summers.
Prerequisite: Geography 516.
Directed research in selected climatological problems, such as evapotranspiration, probability of single or multiple occurrences of weather phenomena, and flood forecasting.

GEO 621. Special Problems in Planning. **Three hours.** I and alternate summers.
Prerequisite: GEO 421 or equivalent in related social science.
Directed research in urban or regional planning, such as functional zoning of cities and underdeveloped areas.

GEO 640. Directed Studies in Regional Geography. **Three hours.** A.
Prerequisite: Departmental permission.
Directed studies in micro regional geography. A student may take a maximum of six credit hours under this course number.

GEO 650. Field and Research Methods in Geography. **Three hours.** I and alternate summers.
Prerequisite: Geography graduate student.
Detailed reconnaissance field work, including classification of natural and cultural features, interview procedures, preparation of geographical reports and maps based on field data. Library facilities and research are also included.

GEO 651. Seminar in History and Philosophy of Geography. **Three hours.** II.
Prerequisite: Departmental permission.
A discussion of the history and development of geographic thought, various schools of geography, philosophies in geography, current and future trends.

GEO 690. Geography Seminar. **Three hours.** A.
Prerequisite: Departmental permission.
Selected geography topics for seminar discussion as student demand and faculty background dictate. Students may take this course for a maximum of six credit hours.

GEO 698. Independent Study. **One to three hours.** I, II, S.
Prerequisite: Departmental permission.
Semi-directed research on selected topics.

GEO 699. Thesis. **Three to six hours.** I, II, S.

GEOLOGY (GLY)

D. C. Haney, Chairman; Hunt, Kiefer, Leung, Nichols and Wigley.

The Department offers two major programs: a major in earth science (teaching) and a major in geology (non-teaching). The geology major is directed toward students pursuing geology as a profession.

Minor programs in earth science and geology may be pursued. Though no distinction is made respective to teaching, the earth science minor is not recommended for students not entering the teaching profession. A total of 21 semester hours in geology is required for a teaching minor.

Students considering geology as a profession are strongly encouraged to take one year of foreign language.

The first two years of the geology program may be found listed in the Central University College section.

Curriculum for a Major in Earth Science (Teaching)

GLY 210, 211, 310, 351, 411, 414, and GEO 210, 216, and 313 are required.

Junior Year	Hours	Senior Year	Hours
Soc. Sci. Elective, B-2	3	GLY 351, 411, 414 or AGR 215	10 or 11
ENG 211, 212	6	Humanities Electives	6
GEO 216, 313	6	ESH 498, 499	14
GLY 310	4	ESH 451	3
EDF 317	4		
PHY 230	3		
Electives	6-11		
	32-37		33 or 34

The second major or minor must be approved by the Chairman of the Department of Geology and the Chairman of the Department of Secondary and Higher Education.

Curriculum for a Major in Geology (Non-Teaching)

GLY 210, 211, 310, 311, 312, 351, 410, 411, 412, 490, Geology Field Camp, six hours technical elective, and GEO 355 are required.

Junior Year	Hours	Senior Year	Hours
ENG 211, 212	6	GLY 312, 351, 410, 411, 412, 490	17
GLY 310, 311	8	GEO 355	3
PHY 131, 132	10	Technical Elective	6
Humanities Elective	6	Elective	6
*MAT 112	4		
Soc. Sci. Elective, B-2	3		
	37		32

*MAT 112 may be replaced by Statistics or Computer courses with departmental approval.

Minor Programs in Geology.

A minor requires a minimum of 18 semester hours, except that 21 hours are required for teacher certification.

Earth Science Minor: GLY 210, 211, 310, 351, 390, GEO 215, PHY 230. For teacher certificates one year of chemistry and/or physics and one year of mathematics (none below the level of college algebra) are required. An Earth Science minor is not recommended for non-teaching majors.

Geology Minor: GLY 210, 211, 310, 410, 411 and GLY elective. For certification in teacher education one year of chemistry and/or physics, one year of mathematics (none below college algebra), and a course in meteorology or climatology are required in addition to the 18 hours of geology.

GRADUATE PROGRAMS

The Department of Geology offers two advanced degree programs: Master of Science with Thesis, and Master of Arts in Education with emphasis in Earth Science. Information pertaining to these graduate degrees may be found in the appropriate sections of the Graduate Catalog.

GEOLOGY (GLY)

GLY 108. Principles of Geology. **Three hours.** I, II, S.

General geology including the study of common minerals and rocks and geologic processes. Designed primarily for non-science majors. Two lecture and two laboratory hours. (Credit not allowed for both GLY 108 and 210.)

GLY 109. Principles of Historical Geology. **Three hours.** I, II, S.
Prerequisite: GLY 108 or equivalent.

Chronologic history of the earth and its inhabitants. Designed primarily for non-science majors. Two lecture and two laboratory hours. (Credit not allowed for both GLY 109 and 211.)

GLY 207. Engineering Geology. **Three hours.** I.
Prerequisite: Pre-engineering majors.

Physical geology related to engineering problems; including structural geology, groundwater, solid study, rock and mineral identification, and geologic and topographic map interpretation. Two lecture and two laboratory hours plus field trips.

GLY 210. Physical Geology. **Four hours.** I, II.

Fundamental composition and structure of the earth, rocks and minerals, and landform origins and modifying agents. Three lecture and two laboratory hours, plus field trips.

GLY 211. Historical Geology. **Three hours.** II.
Prerequisite: GLY 210 or departmental approval.

Principles of the interpretation of earth history. Evolution of continents, mountain systems and oceans, and the development of the earth's animals and plants. Two lecture and two laboratory hours.

GLY 300. Geology (............................). **One to nine hours.** A.

A geology course designed for undergraduate institute participants. Course content will be developed to adequately serve the aims of the institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Physical Geology, Education Geology, etc. The designated semester hours which can be earned will also be specified for a given institute.

GLY 302. Earth Science. **Three hours.** I, II, S.
Solar system and the heavenly bodies, their motions and laws which control them, atmosphere and weather, atmospheric motions and their effects, climatic elements and controls, structure and surface forms of the earth, flora, fauna and resources. (Credit for GLY 302 is not allowed if student has credit for GLY 108 or 210).

GLY 310. Mineralogy. **Four hours.** I.
Prerequisite: GLY 210, CHE 111.

Mineral classes and occurrences, principles of crystallography, and techniques of mineral identification. Two lecture hours and four laboratory hours.

GLY 311. Optical Mineralogy and Petrography. **Four hours.** II.
Prerequisite: GLY 310.

Identification of non-opaque minerals by immersion methods using petrographic microscopes. Two lecture and four laboratory hours.

GLY 312. Petrology. **Three hours.** I.
Prerequisite: GLY 311.

Origin and nature of igneous, sedimentary, and metamorphic rocks. Important rock types are studied and classified by standard identification techniques. Two lectures and two laboratory hours.

GLY 313. X-ray Diffraction Techniques. **Three hours.** A.
Prerequisite: PHY 131, 132, GLY 310, or departmental consent.

Principles of X-ray Diffraction as a tool for analysis of crystalline substances. Special attention is given to mineral identification, analysis of mineral structures, and elemental analysis by X-ray diffraction and emission.

GLY 351. Field Geology. **Three hours.** I or II.
Prerequisite: GLY 108 or 210.
Field techniques, plane table surveying, description and measurement of stratigraphic section; fundamental geologic mapping. One lecture and four hours in the field (Saturdays).

GLY 390. Environmental Geology. **Three hours.** A.
Prerequisite: GLY 108, or GLY 210 or departmental consent.
A general course designed primarily for non-science majors. Gives the students an awareness of the relationship of geology to his environment. Specific topics will deal with the role of geology in urban and rural planning, water resources, waste disposal and land fill projects, conservation, and other environmentally related areas.

GLY 410. Structural Geology. **Three hours.** I.
Prerequisite: GLY 210, 211, MAT 109 or consent of instructor.
Architecture of the earth. Properties and behavior of rocks under different geologic conditions, geologic structure, and solution of structural problems are studied. Two lecture and two laboratory hours plus field trips.

GLY 411. Introduction to Invertebrate Paleoentology. **Four hours.** I.
Prerequisite: GLY 211, BIO 141 or departmental approval.
Morphology, distribution in time and space, evolution and paleocology of fossil invertebrates. Two lecture and four laboratory hours.

GLY 412. Stratigraphy and Sedimentation. **Three hours.** II.
Prerequisite: GLY 211.
Principles of stratigraphy and sedimentation illustrated with reference to the geologic columns on a world-wide basis. Two lecture and two laboratory hours.

GLY 414. Geology of Soils. **Three hours.** A.
Prerequisite: CHE 111, 112.
Chemical and physical characteristics of soils and soil morphology. Includes field trips. Two lecture and two laboratory hours.

GLY 430. Economic Geology. **Three hours.** II.
Prerequisite: GLY 310, 410.
Formation of mineral deposits and their distribution within the earth's crust. Two lecture and two laboratory hours.

GLY 440. Geology of Kentucky. **Three hours.** I, II, S.
Prerequisite: GLY 108, 210, or departmental approval.
General geologic study of Kentucky including landforms, waters, rock distribution and soils.

GLY 450. Aerial Photography and Map Interpretation. **Two hours.** A.
Prerequisite: GEO 313 and GLY 410.
Methods of analyzing and interpreting geologic, physiographic, and cultural features from geologic and topographic maps and from aerial photographs using the stereoscope. One lecture and two laboratory hours.

GLY 490. Geology Senior Seminar. **One hour.** II.
Prerequisite: Departmental approval.
Topic selected by class from list submitted by seminar chairman. One hour each week, seminar leadership rotating among students. Students may take this course for a maximum of three credit hours.

GLY 500. Geology (................................). **One to nine hours.** A.
A geology course designed for undergraduate and graduate institute participants. Course content will be developed to adequately serve the aims of the institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Physical Geology, Educational Geology, etc. The designated semester hours which can be earned will also be specified for a given institute.

GLY 510. Advanced Structural Geology. **Three hours.** A.
Prerequisite: GLY 410 or consent of instructor.
Advanced study of the architecture of the earth. Structures of mountains, regionally and world-wide, and mechanisms of deformation are considered in detail.

GLY 511. Advanced Paleontology. **Three hours.** A.
Prerequisite: GLY 411 or consent of instructor.

Study of taxonomy, biostratigraphy, and paleoecology of fossils. Emphasis placed on foraminifera, brachiopods, mollusks, ostracodes, and conodonts. Two lectures and two laboratory hours plus field trips.

GLY 512. Sedimentology. **Three hours.** A.
Prerequisite: GLY 411 or departmental approval.

Study of sediments. Physical condition of deposition, time of formation of deposits, and provenance emphasized. Size, shape, and composition of sediments analyzed statistically. Two lecture and two laboratory hours.

GLY 532. Geology of Fuels. **Four hours.** A.
Prerequisite: GLY 430.

Origin, occurrences, and uses of natural fuels. Three lecture and two laboratory hours, plus field trips as deemed appropriate.

GLY 533. Industrial Minerals. **Four hours.** A.
Prerequisite: GLY 430.

Origin, occurrence, and use of industrial rocks and minerals. Three lecture and two laboratory hours.

GLY 560. Geochemistry. **Four hours.**
Prerequisites: CHE 112, and GLY 310 or departmental approval.

Principles of the distribution of the elements in the earth's crust. Phase equilibria pertinent to geologic problems. Major methods of geochemical analysis and exploration. Introduction to isotopes and their uses in geochronology. Three lecture and two laboratory hours.

GLY 598. Special Problems in Geology. **One to four hours.** I, II, S.
Prerequisite: Departmental approval.

Course topic determined by student and instructor.

GRADUATE COURSES

GLY 600. Geology (..............................). **One to nine hours.** A.

A geology course designed for graduate institute participants. Course content will be developed to adequately serve the aims of the institute. The specific orientation will appear in parenthesis behind the course title, that is, Earth Science, Physical Geology, Education Geology, etc. The designated semester hours which can be earned will also be specified for a given institute.

GLY 610. Geotectonics. **Three hours.** A.
Prerequisite: Departmental approval.

Topic selected by students and instructor in the area of structural geology.

GLY 612. Clay Mineralogy. **Four hours.**
Prerequisite: GLY 313 or departmental approval.

Structure, origin, occurrence, and use of clay minerals. X-ray diffraction techniques and differential thermal analysis will be used to identify clay minerals. Two lecture and four laboratory hours.

GLY 622. Igneous and Metamorphic Petrology. **Four hours.**
Prerequisites: GLY 311 and 312.

Origin and occurrence and composition of igneous and metamorphic rocks. Emphasis on Precambrian batholiths and associated rocks. Three lecture and two laboratory hours.

GLY 623. Sedimentary Petrology. **Four hours.**
Prerequisites: GLY 311 and 312.

Origin, occurrence, and composition of sedimentary rocks. Three lecture and two laboratory hours.

GLY 630. Geophysical Exploration. **Four hours.**
Prerequisite: Departmental approval.
Principles and techniques of gravimetric, seismic, magnetic, and other geophysical methods of exploration for petroleum and economic minerals. Three lecture and two laboratory hours.

GLY 680. Seminar (..............................). **One to four hours.**
Prerequisite: Departmental approval.
A geology course designed to fit specialized needs of individual students. May be taken in stratigraphy, paleontology, mineralogy, petrology, geomorphology, or structural geology. May be repeated for a maximum of four hours.

GLY 699. Thesis. **Three to six hours.**

HISTORY (HIS)

G. W. Robinson, Chairman; Algier, W. Berge, Bliss, Coe, Duszak, R. Forderhase, N. Forderhase, Graybar, Keen, C. Lewis, B. Mutersbaugh, Odum, O'Neill, R. Stebbins, Tsao, Yeo.

A student may major in History (teaching) by completing the following courses: HIS 202, 203, 448, 449, six hours non-restricted elective in history, six hours elective in U. S. History, and six hours elective in non-U. S. History. Six hours of one foreign language is required.

Sixty-six hours will be completed in the junior and senior years. Courses for a history major for the first two years may be found in the Central University College section. Courses for the last two years are as follows:

Junior	Hours	Senior	Hours
EDF 317	4	HIS 448, 449, ESH 449, and three hours HIS elective	12
Non-U.S. HIS electives	6	ESH 498, 499	14
U.S. HIS electives	6	Electives (Minor)	6
General Education Science or Math elective & SCI 310	6		
HIS elective or GSS 248	3		
Electives (Minor)	9		
	34		32

The history major (non-teaching) requires 63 hours in the junior and senior years. Twelve hours in one foreign language is required. Courses for a history major for the first two years may be found in the Central University College section. Courses for the last two years are as follows:

Junior	Hours	Senior	Hours
Non-U.S. HIS electives	6	HIS 448, 449	6
U.S. HIS electives	6	Electives (minor)	3
General Education Science or Math elective & SCI 310	6	Electives	21
HIS elective or GSS 248	3		
Three hours foreign language	3		
Electives (Minor)	9		
	33		30

For a minor in history (non-teaching and teaching) the following courses are required: HIS 202, 203, GSS 246, 247, six hours upper division U. S. electives and six hours upper division non-U. S. electives.

HISTORY AND SOCIAL SCIENCE AREA
(Teaching Only)

The student who wishes to take an area in History and Social Science (teaching) must take the following courses: HIS 202, 203, 448, 449, 398, 399, six hours elective U. S. History, and six hours elective in non-U. S. History. Two of the following five social science fields may be elected: anthropology, economics, geography, political science and sociology. The student must take twelve hours from each of the two fields elected in the following way: ANT 201, 202, and six hours upper division anthropology; ECO 230, 231, and six hours upper division economics; GEO 101, 102, and six hours upper division geography; POL 100, 101, and six hours upper division political science; SOC 231 and nine hours elective sociology. Six of the nine elective hours in sociology must be upper division.

There is no non-teaching history and social science area major.

The history and social science area major (teaching) requires 66 hours in the Junior and Senior years. Courses for an area in history and social science for the first two years may be found in the Central University College section. Courses for the last two years are as follows:

Junior	Hours	Senior	Hours
EDF 317	4	HIS 393 or 399, 448, 449, ESH 449	12
U.S. HIS electives	6	Social Science electives	6
Non-U.S. HIS electives	6	ESH 498, 499	14
HIS 398 or 399	3		
Social Science elective or GSS 248 and Social Science electives	9		
General Education Science or Math and SCI 310	6		
	34		32

GRADUATE PROGRAMS

The Department of History offers three advanced degree programs: Master of Arts with thesis, Master of Arts without thesis, and Master of Arts in Education with emphasis in History.

Candidates for the Master of Arts with thesis are required to prepare in one of three major fields—American History or European History or Latin American History plus a minor field for a total of 30 hours. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) a foreign language examination, (3) a comprehensive written examination over the fields of major and minor interest, (4) a thesis, and (5) an oral defense of the thesis.

Candidates for the Master of Arts without thesis are required to prepare in one of three major fields, American or European or Latin American History plus one or two minor fields and must complete 36 hours altogether. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) comprehensive written examinations over major and minor fields, and (3) oral examination of the candidate's mastery of historical knowledge.

Candidates for the Master of Arts in Education (Secondary Education-History) are required to prepare in a major field—American or European History plus a minor field. Degree requirements include, in addition, successful completion of the following: (1) Graduate Record Examination, (2) ten hours of course work in Education, and (3) an oral examination over the fields of major and minor interest.

See the Graduate Bulletin for additional information concerning the M.A. programs in history.

HISTORY (HIS)

HIS 202. American Civilization to 1877. **Three hours.** I, II.

Patterns of discovery, exploration, conquest and colonization by European peoples; relationship between European and frontier culture; revolution; establishment of government and development of nationalism; sectionalism; Civil War and Reconstruction. Required of all majors and minors in history.

HIS 203. American Civilization since 1877. **Three hours.** I, II.

Rise of industrialism; problems of the American farmer; social and cultural advance; the last American frontier; American imperialism; World Wars; Progressive movement and New Deal; America as a great power since World War II. Required of all majors and minors in history.

HIS 305. (Formerly HIS 520.) The Afro-American in U. S. History. **Three hours.** A.

African heritage; middle passage; the peculiar institution; the Negro and the Civil War; reconstruction; the strange career of Jim Crow; modern emancipation; black nationalism.

HIS 339. Medieval Civilization. **Three hours.** A.
Prerequisite: GSS 246.

Survey of Western, Byzantine, and Saracenic cultures from the breakdown of the Roman Empire to the emergence of modern national states.

HIS 340. European History from 1300 to 1815. **Three hours.** A.
Prerequisite: GSS 246.

Renaissance and Reformation; rise of the national state and royal absolutism; decline of manorialism; rise of capitalism and mercantile system; British revolutions of the seventeenth century; international rivalries; age of reason and enlightened despotism; French Revolution and Napoleon.

HIS 345. English History to 1603. **Three hours.** I.
Prerequisite: GSS 246.

Roman Britain; Anglo-Saxon Civilization; Normans and Angevins; Norman Feudalism; growth of royal power; English Common Law; baronial opposition to the Crown; rise of Parliament; medieval government and administration; Hundred Years' War; York vs. Lancaster; transition from medievalism; Tudor Monarchy; Reformation; Parliamentary progress; Elizabethan Age.

HIS 346. English History from 1603 to the present. **Three hours.** II.
Prerequisite: GSS 246.

Early Stuarts and national crisis; Civil War and Interregnum; later Stuarts; Imperial expansion and intellectual ferment; Hanoverian Era; Parliamentary and Cabinet government; beginnings of industrialization; impact of French Revolution and Napoleonic Wars; Age of Reform; Victorian Liberalism and culture; Industrialization; two World Wars and after.

HIS 347. Recent and Current World History, 1914 to the present. **Three hours.** A.
Prerequisite: GSS 247.

World War I; peace settlement of 1919; problems of security; war debts and reparations; disintegration of peace settlement; World War II; the Cold War.

HIS 356. German History from the French Revolution to 1870. **Three hours.** A.
Prerequisite: GSS 247.

Characteristics of German Civilization from the Reformation to the French Revolution; the French Revolution and the rise of German nationalism; the Congress of Vienna; the rise of Liberalism; Revolutions of 1848 and the Frankfurt Assembly; the defeat of Liberalism and Austria.

HIS 360. (Formerly HIS 560.) History of Russia I. **Three hours.** A.
Prerequisite: GSS 246.

Formative period of Slavic states. Establishment and development of the Kievan and Muscovite states. Social and economic forces that led to the rise of autocracy. Foreign policy from Peter the Great to Alexander I.

HIS 361. (Formerly HIS 561.) History of Russia II. **Three hours.** II.
Prerequisite: GSS 247.

Nineteenth century to Revolution of 1917. Growth of revolutionary thought and action. Revolutions of 1825, 1905, and 1917. Serfdom, agrarian reforms, industrialization, literature, art, science of the 19th century.

HIS 366. Imperial Spain, 1489-1815. **Three hours.** A.
Prerequisite: GSS 246.

Political and cultural history from the period of its predominance in European and American affairs until its decline in the 17th and 18th centuries.

HIS 370. (Formerly HIS 570.) Far Eastern History to the 19th Century. **Three hours.** I.
Prerequisite: GSS 246.

Survey of China and Japan from ancient times to the end of the 18th century, emphasizing characteristic political, economic, social, religious, and cultural developments. Reference made to peripheral areas.

HIS 371. (Formerly HIS 571.) Far Eastern History in the 19th and 20th Centuries. **Three hours.** II.
Prerequisite: GSS 247.

Survey of China and Japan in the 19th and 20th Centuries. Attention given to impact of the West, intellectual and cultural movements, political, economic, and social developments.

HIS 380. (Formerly HIS 380.) History of Latin America. **Three hours.** I.
Prerequisite: GSS 246.

European and American background; discovery, conquest, expansion; techniques of government; social and economic institutions to independence.

HIS 381. (Formerly HIS 581.) History of Latin America. **Three hours.** II.
Prerequisite: GSS 247.

Comparative treatment of political, economic, and social institutions of Latin American republics from attainment of independence to the present.

HIS 398. (Formerly HIS 498.) (CL PHI 398.) Ideological Foundations of Western Civilization. **Three hours.** I, II.
Not applicable as history elective.

Introduction to basic concepts in the ideological heritage of the Western World from the end of the medieval age through the Enlightenment. Readings consist largely of selections from great books and documents in religion, science, economics, political theory, and philosophy.

HIS 399. (Formerly HIS 499.) (CL PHI 399.) Ideological Foundations of Western Civilization. **Three hours.** I, II.
Not applicable as history elective.

Introduction to basic concepts in the ideological heritage of the Western World from the Enlightenment to the present. Readings consist largely of selections from great books and documents in religion, science, economics, political theory, and philosophy.

HIS 401. (Formerly HIS 501.) American Colonial Period. **Three hours.** A.
Prerequisite: HIS 202.
Political and social history of the thirteen colonies and their neighbors; European background, settlement, westward expansion; intercolonial conflicts; beginnings of culture; colonial opposition to imperial authority.

HIS 405. America's Westward Expansion. **Three hours.** A.
Prerequisite: HIS 202.
Colonial frontier; conflicts of Empire; trans-mountain movements; Ohio-Mississippi valleys; Indian problems; Manifest Destiny; the West and the sectional struggle; trans-Mississippi frontier of mining, railroads, cattle, and agriculture; West versus East.

HIS 406. The South in American History. **Three hours.** A.
Prerequisite: HIS 202.
Colonial developments in society and politics; origins of sectional consciousness; institutions of Negro slavery and plantation system; southern ideas and ideals; Civil War and Reconstruction; modern South.

HIS 410. (Formerly HIS 510.) The Gilded Age, 1877-1898. **Three hours.** A.
America's industrial expansion; rise of labor unions; the farm protest; political bossism.

HIS 413. (Formerly HIS 513.) The United States and World Responsibility, 1945-Present. **Three hours.** A.
Problems of post-war adjustment; the cold war; the affluent society; problems inherent in world leadership.

HIS 433. American Diplomatic History. **Three hours.** A.
Prerequisites: HIS 202 and HIS 203.
American foreign relations from 1776 to present, emphasis on development of major trends such as isolationism, imperialism, and internationalism.

HIS 437. American Constitutional History to 1865. **Three hours.** I.
Prerequisite: HIS 202.
European and colonial origin of the Constitution; creation and ratification of the Constitution; Jeffersonianism and Judicial Nationalism; Nullification doctrine and sectional conflict. Secession and Civil War.

HIS 438. American Constitutional History since 1865. **Three hours.** II.
Prerequisite: HIS 203.
Constitutional reconstruction. Revolution in due process of law, National economic regulation. Reaction and laissez faire. Constitutional revolution; New Deal, New Federalism and civil liberties.

HIS 440. (Formerly HIS 540.) Renaissance and Reformation. **Three hours.** A.
Prerequisite: GSS 246.
Transformation of European civilization from medieval to modern period, 1350-1650. Emphasis upon changes in political, religious, and economic institutions of Europe, reflection of these changes in intellectual thought.

HIS 445. Europe from 1815 to 1870. **Three hours.** A.
Prerequisite: GSS 247.
Congress of Vienna and reaction following Napoleonic wars; revolutions of 1820, 1830, and 1848; liberalism, realism, and nationalism; growth of science and technology.

HIS 446. Europe from 1870 to 1914. **Three hours.** A.
Prerequisite: GSS 247.
Survey of the rapidly growing European society, economy, and world-wide impact in the period prior to the First World War; industrialism; imperialism; diplomatic background of World War I.

HIS 448. Topics in History and Social Science. **Three hours.** I, II.
Prerequisite: History major and six hours upper division history.
An introduction to the elements of research in social science and history. Development of facility of expression in writing. Study topics made on basis of training and special interests of students. Varies each semester according to the specialties of instructor.

HIS 449. Readings in History. **Three hours.** I, II.
Prerequisite: History major and three hours upper division history.
Introduction to the most important literature in various historical fields. Varies each semester according to the specialties of instructor.

HIS 461. Kentucky History. **Three hours.** I, II.
General, social, economic, and political history, influence in development of American democracy; periods of leadership in the nation; educational system; her great men and women; historical sources.

HIS 475. Islamic Empires. **Three hours.** I.
Prerequisite: GSS 246.
Growth and spread of Islam, the Umayyed, Abbasid, Fatimid, and Ottoman Empires. Focus on Islamic institution and broad comparative analysis.

HIS 476. The Modern Middle East. **Three hours.** II.
Prerequisite: GSS 247.
Breakdown of the Ottoman Empire, growth of Arab nationalism and emergence of Arab states, Iran and Turkey, their problems in the contemporary world.

HIS 483. Modern India. **Three hours.** A.
Prerequisite: GSS 247.
Present-day India, emphasizing post independence developments. Some stress on ancient influences upon the modern scene such as religious, social institutions, foreign rule, economic systems.

HIS 502. American Revolution and the Constitution. **Three hours.** A.
Prerequisite: HIS 202.
Colonial background of Revolution; internal and external nature of Revolution; problems associated with Confederation; events leading to the American Constitution.

HIS 503. Jacksonian Democracy. **Three hours.** A.
Prerequisite: HIS 202.
Criticism of the concept. Party issues, nationalism, and the importance of the age.

HIS 507. Civil War and Reconstruction. **Three hours.** A.
Prerequisite: HIS 202.
Ante-bellum South, ante-bellum North; anti-slavery agitation, growth of sectional consciousness; recurrent crises; secession; war; military operations; internal developments in the North and South; Confederate collapse; problems of reconstruction; social, political, and economic reconstruction; aftermath.

HIS 508. The Emergence of American Nationalism, 1789-1824. **Three hours.** A.
Prerequisite: HIS 202.
Federalists; Republicans and the Constitution; America and the French Revolution; War of 1812; break up of political parties; emergence of new political divisions.

HIS 511. The Progressive Era and World War I, 1898-1920. **Three hours.** A.
Prerequisite: HIS 203.
Progressive movement; imperialism; American entry into war; the Treaty of Versailles, League of Nations.

HIS 512. Prosperity, Depression, and War, 1920-1945. **Three hours.** A.
Prerequisite: HIS 203.
Internationalism and isolationism; prosperity in the twenties; depression and efforts to cope with it; the coming of World War II; United States participation in war.

HIS 525. Twentieth Century Afro-American History. **Three hours.** A.
Prerequisite: HIS 203 or consent of instructor.
An in-depth study of the contributions of Afro-Americans and their struggles for the privileges and immunities of citizenship, interwoven with the experiences of the United States from world power to prober of outer space.

HIS 530. American Social and Intellectual History to 1850. **Three hours.** A.
Prerequisite: HIS 202.
European influences; the colonial mind; revolutionary attitudes; New England's leadership; the movement of protest and reform; the rise of a native literature.

HIS 531. American Social and Intellectual History since 1850. **Three hours. A.**
Prerequisite: HIS 203.
The Civil War; Protestantism and capitalism; Social Darwinism; literature of naturalism and realism; the twentieth-century mind.

HIS 535. Ancient History in the Near East and Greece. **Three hours. A.**
Prerequisite: GSS 246.
Ancience Near East and Greece from prehistoric times to Alexander the Great and his successors; early food production; rise of civilization in Babylonia and Egypt; development of economic and political institutions; art; science; literature; and religion.

HIS 536. History of Rome. **Three hours. A.**
Prerequisite: GSS 246.
Rome from prehistoric village to the dominant power in the Mediterranean world; rise and decline of the Empire in the West.

HIS 541. The Age of the Enlightenment. **Three hours. A.**
Prerequisite: GSS 246.
European intellectual history, 1650-1789; scientific revolution, Cartesian and Newtonian schools; enlightenment as an European phenomenon; emphasis on the eighteenth century as an age of political and social criticism.

HIS 542. The French Revolution and Napoleon, 1789-1815. **Three hours. A.**
Prerequisite: GSS 247.
Background, analysis of various stages of the Revolution and their reflection of foreign policy; establishment of the First Empire; reasons for its collapse; effects of the Revolution upon France and Europe; 1815 as a watershed of European history.

HIS 544. Modern European Intellectual History. **Three hours. A.**
Prerequisite: GSS 247.
European civilization in the 19th and 20th centuries; emphasis upon institutions, ideas, and cultural forms distinguishing the period.

HIS 547. Tudor England, 1485-1603. **Three hours. A.**
Prerequisite: HIS 345 or consent of instructor.
Henry VII and resurgence of the monarchy; Henry VIII and revolt against Rome; Protestant Reformation; Cromwell's reforms; Edward VI and Marian Reaction; character and policies of Elizabeth I; Elizabethan settlement; Catholics vs. Puritans; Elizabethan diplomacy and Spanish War; Tudor Constitution and rise of Parliament; Elizabethan Renaissance.

HIS 548. Stuart England, 1603-1714. **Three hours. A.**
Prerequisite: HIS 346 or consent of instructor.
Characters and policies of early Stuarts; constitutional conflicts; Angelicanism vs. Puritanism; collapse of Tudor Constitution; English Civil War; Cromwell and Interregnum; Charles II and Restoration; growth of the Empire; Glorious Revolution; Britain as a great power; reign of Queen Anne.

HIS 550. Emergence of Victorian Britain. **Three hours. A.**
Prerequisite: HIS 346 or consent of instructor.
Economic and intellectual backgrounds of 19th century; French Revolution and Napoleonic threat; reaction and reform after 1815; Victorian thought; origins of the Commonwealth; age of Palmerston in foreign affairs.

HIS 551. Britain and the Empire in Adversity, 1867-Present. **Three hours. A.**
Prerequisite: HIS 346 or consent of instructor.
Characteristics of a new era; Reform Bill of 1867; economic and intellectual trends in late 19th century; decline of liberalism in politics; revival of imperialism; coming of World War I; emergence of the Commonwealth; impact of World War II; Conservative-Labor contention; Britain's role in the "cold" war.

HIS 557. Germany since 1870. **Three hours. A.**
Prerequisite: GSS 247.
Background; rise of Prussia; German nationalism and particularism; creation of the German Empire; its rule under Bismarck and William II; Peace Treaty and Weimar Republic; Nazi Germany; Second World War; allied occupation.

HIS 562. History of the Soviet Union. **Three hours.** II.
Prerequisite: GSS 247.
The 1917 revolution to the present. Establishment of the Soviet regime; New Economic Policy; Five-Year Plans; Soviet system of government; World War II; post-war years; cultural trends underlying political, economic, and social developments of the Soviet era.

HIS 564. (Formerly HIS 364.) History of Russian-American Relations. **Three hours.** A.
Prerequisite: GSS 246, 247.
Origin of Russian-American relations during the Colonial Period. Development of commercial relations and beginning of Russian-American diplomacy of Imperial Russia. Evolution of Soviet-American relations during the 20th century.

HIS 572. (Formerly HIS 372.) History of Southeast Asia. **Three hours.** A.
Prerequisite: GSS 246, 247.
History of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia. Indonesia, and the Philippines from the earliest time to the present. Special attention given to economic, social, and cultural change.

HIS 573. Twentieth Century China. **Three hours.** A.
Prerequisite: GSS 247.
Origins of communism in China; Revolution of 1911; Kuomintang; Mao Tso Tung; the Long March; World War II; Defeat of Chiang Kai-shek; Red China.

HIS 582. History of Mexico. **Three hours.** A.
Prerequisite: GSS 246, 247.
Mexican History from the Spanish conquest to present with emphasis on Mexican Revolution of 1910 and its effect on political, economic, social, and military institutions.

HIS 585. History of Brazil. **Three hours.** A.
Prerequisite: GSS 246, 247.
An examination of Brazil's history from 1500 to the present with emphasis on developments since 1930.

GRADUATE COURSES

HIS 601. Survey of Historiography. **Three hours.** II .
Seminar approach to the history of historical writings and interpretation. Attention to selected works of great historians from Herodotus to the present. Required of all candidates.

HIS 603. Historical Criticism. **Three hours.** I.
Seminar in fundamental techniques of the historian; using basic bibliographical tools; locating and evaluating source materials; writing book reviews; critically interpreting historical evidence. Required of all candidates.

HIS 604. History as a Social Science. **Three hours.** A.
Scientific approach to social problems and their historical interpretations; analysis of economic, social intellectual, and political backgrounds of contemporary civilization.

HIS 605. The Humanities approach to History. **Three hours.** A.
The "American Character" and its development as an example of the humanities approach to the study of history.

HIS 606. Problems in Interpreting World History. **Three hours.** A.
Seminar on selected controversial development in world history.

HIS 607. Problems in Interpreting American History. **Three hours.** A.
Seminar on selected controversial developments in American history.

HIS 610. Seminar in American History. **Three hours.** A.
Reading and investigations in a field other than the student's specialty. Required of all American history thesis majors.

HIS 611. Seminar in American History. Three hours. A.
Techniques of research, note-taking, documentation; occasional lectures and class discussions of major problems and controversies. Fields vary each semester. Required of all American history thesis majors.

HIS 620. Topics in Early 19th Century English History, 1815-1867. Three hours. A.
Seminar in the Victorian era. Students conduct original research; prepare papers; submit work to class for criticism and discussion. Required of all English history thesis majors.

HIS 625. Seminar in Latin American History. Three hours. A.
Research, discussion, and writing in Latin American history with special emphasis on Mexico. Required of all Latin American history thesis majors.

HIS 649. Readings and Research. Three hours. A.
Independent study in a specific field.

HIS 698. Thesis Tutorial I. Three hours. A.

HIS 699. Thesis Tutorial II. Three hours. A.

MATHEMATICS (MAT)

B. R. Lane, Chairman; Bland, Brashear, Brooks, Ecklar, A. Howard, King, J. LeVan, M. LeVan, A. McGlasson, McLean, Nayle, Ng, Pierce, F. Scorsone, Short, Stephens.

A student may major in Mathematics (teaching) by completing the following courses: MAT 111, 112, 213, 308, 334, 370, 380 and six hours elected from courses numbered above 300.

A student may major in Mathematics (non-teaching) by completing the following courses: MAT 111, 112, 213, 308, 334, 370, 414, 453, 480 and six hours elected from courses numbered above 300.

All Mathematics majors must take PHY 201 and 202 (or equivalent courses approved by the Chairman of the Mathematics Department).

A student may minor in Mathematics (non-teaching) by taking the following courses: MAT 109, 111, 112, 213 and three hours elected from courses numbered above 300. If a student is eligible to begin a minor with MAT 111, he will elect six hours of appropriate courses numbered above 300 after completion of MAT 213. A total of 21 semester hours in Mathematics is required for a teaching minor.

The Mathematics Department, in cooperation with the Graduate School and the College of Education, also offers an emphasis in Mathematics applying toward the M.A. degree in Education.

The regulations for the M.A. degree in Education program may be found in the College of Education section of the Graduate Bulletin. Students obtaining the M.A. degree in Education with the emphasis in Mathematics must select courses in conference with their advisor.

The first two years for the major in Mathematics (teaching and non-teaching) may be found in the Central University College section.

Courses for the last two years (teaching) are as follows:

Junior Year	Hours	Senior Year	Hours
EDF 317	4	MAT Electives	3 or 6
MAT 308, 334, 370	9	ESH 450	3
MAT 380 or Elective	3	ESH 498, 499	14
ENG 209 or 211, 210 or 212	6	Electives (minor)	11 or 12
Humanities Electives	6		
Electives (minor)	3-6		
	29-32		31-35

Courses for the last two years (non-teaching) are as follows:

Junior Year	Hours	Senior Year	Hours
MAT 308, 334, 453	9	MAT 414, 480	4
MAT 370 or Elective	3	MAT Electives	3 or 6
Humanities Electives	6	Electives	23-26
Electives (minor)	12-15		
	30-33		30-36

MATHEMATICS (MAT)

MAT 107. College Algebra. **Three hours.** I, II.

For students who are not majors or minors in Chemistry, Mathematics, or Physics. Sets and logic; number systems; integers, rational numbers, real numbers, complex numbers; equations and inequalities; functions and their graphs; systems of equations.

MAT 109. Algebra and Trigonometry. **Five hours.** I, II.

May not be taken for credit by students who have credit for MAT 107 or 113; offered for students who need this background for MAT 111. Sets; real numbers, functions and graphs; trigonometric, exponential and logarithmic functions; polynomial functions, equations and inequalities; inverse trigonometric functions; complex numbers.

MAT 110. Analytic Trigonometry. **One hour.** I.

Prerequisite: Approval of the Mathematics Department.

Corequisite: MAT 111.

The study of the properties of the circular functions; properties of the logarithmic functions. For students with adequate background in algebra who have studied high school trigonometry, but have insufficient trigonometry background as determined by the department.

MAT 111. Analytic Geometry and Calculus I. **Four hours.** I, II.

Prerequisite: MAT 109 or equivalent.

Rectangular coordinates; straight lines; limits and continuity; the derivative; algebraic functions and their derivatives; applications of differentiation; the differential; the law of the mean and applications.

MAT 112. Analytic Geometry and Calculus II. **Four hours.** I, II.

Prerequisite: MAT 111.

Continuation of MAT 111. Definite integral and applications; conics; differentiation and integration of transcendental functions; parametric equations and polar coordinates.

MAT 200. Fundamental Principles of Mathematics. **Three hours.** I, II.

Not open to Mathematics majors. Provides general college student with an understanding of basic meanings and concepts in mathematics. Selected topics from set theory, logic and proof, number and numeration, algebra, measurement, geometry and statistics.

MAT 201. Understanding Arithmetic. **Three hours.** I, II.

Not open to students who have taken MAT 203. For future teachers in elementary grades. Emphasis put on meaning rather than upon manipulation as such. Topics covered are number and numerals, sets and numbers, number operations, fundamental operations, number scales, number structure, fractions, decimals and the real number system.

MAT 202. Understanding Elementary Mathematics. **Three hours.** I, II.
Prerequisite: MAT 201; not open to students who have taken MAT 203.

Continuation of MAT 201 with the introduction of the ideas of modern mathematics, elementary logic, geometry, number concept, extending the number system, numeration, exponents, measurement, functions and graphs.

MAT 203. Structure of the Number System. **Three hours.** I, II.
Prerequisite: Permission of Mathematics Department. Note open to students who have taken MAT 201 or MAT 202
For future teachers in elementary grades. Properties of sets, whole numbers, operations, numeration, integers, rational numbers, real numbers.

MAT 204. Informal Geometry. **Three hours.** I, II.
Prerequisite: MAT 202 or 203.
For future teachers in elementary grades.
An informal (non-rigorous) study of both metric and non-metric geometry. Properties of lines, planes, congruence, parallelism, triangles, circles, solid figures, and compass-straight edge constructions.

MAT 207. Introduction to Statistics. **Three hours.** I, II.
Prerequisite: MAT 107 or equivalent.

Elementary probability, probability distributions, sampling, estimation, testing hypotheses, correlation and regression.

MAT 211. (CL PHI 211.) Introductory Logic. **Three hours.** I, II.
Principles of modern logic through the propositional calculus and elementary quantification. Attention paid to historical development and philosophical foundations of logic.

MAT 213. Analytic Geometry and Calculus III. **Four hours.** I, II.
Prerequisite: MAT 112.
Continuation of MAT 112. Formulas and methods of integration; infinite series; hyperbolic functions; solid analytic geometry; partial derivatives; multiple integrals.

MAT 272. Introduction to Digital Computer Techniques. **One hour.** I, II.
Prerequisite: MAT 107 or equivalent.

Communication with the modern electronic digital computer. Basic principles of a problem-oriented programming language (FORTRAN). Selected problems for computer solution from the natural, social, and behavioral sciences.

MAT 308. Introduction to Modern Algebra I. **Three hours.** I, II.
Prerequisite: MAT 213.

Fundamental concepts: sets, mappings, relations and operations; rings; isomorphism; integral domains and properties of integers; fields, rational numbers, real numbers, complex numbers.

MAT 309. Introduction to Modern Algebra II. **Three hours.** II.
Prerequisite: MAT 308.

Continuation of MAT 308. Polynominals; groups; vector spaces; systems of linear equations; determinants; linear transformations and matrices.

MAT 334. (Formerly MAT 534). Modern College Geometry. **Three hours.** I, II.
Prerequisite: High School Geometry and MAT 112.

Logical systems and basic laws of reasoning; special topics of axiomatic geometry; Menelaus's and Ceva's theorems; harmonic elements and cross ratio; projective geometry; basic axioms; quality; Desargue's theorem; perspective figures; coordinate projective geometry; transformation theory.

MAT 370. Mathematical Statistics I. **Three hours.** I, II.
Prerequisite: MAT 213.

Algebra of sets, set functions; distributions of random variables, conditional probability and stochastic independence, correlation coefficient; special distributions; mathematical expectations of functions of random variables; random intervals, confidence intervals for means and variances, Bayesian interval estimates; order statistics, limiting distributions, central limit theorem.

MAT 371. Mathematical Statistics II. **Three hours.** A.
Prerequisite: MAT 370.

Hypothesis testing, confidence intervals, special distribution functions, order statistics, central limit theorem, correlation and regression, analysis of variance.

MAT 372. Introduction to Digital Computers and Programming. **Three hours.** I.
Prerequisite: MAT 112 or consent of the instructor.

Solving of problems of mathematics, science, engineering, statistics, and other sciences by computer. FORTRAN IV is primary language to be developed. Emphasis on programming; however, development of the FORTRAN language is illustrated with elementary numerical methods and scientific applications. Students write programs for the H 200 computer.

MAT 380. History of Mathematics. **Three hours.** II.
Prerequisite: MAT 213.

Number systems; Babylonian, Egyptian and Greek contributions; Pythagorean mathematics; Euclidean and non-Euclidean Geometry; three famous problems of antiquity; Hindu and Arabian contributions; mathematics during the Dark Ages and Renaissance; modern mathematics, beginning with the invention of analytic geometry and calculus.

MAT 410. Introduction to Set Theory and Point Set Topology. **Three hours.** A.
Prerequisite: MAT 308.

Sets, relations and functions; countability; axiom of choice; neighborhoods; limits and continuity; topological spaces; connectedness; compactness; finite product spaces; applications to the real line and to metric spaces.

MAT 414. (Formerly covered in part by MAT 454.) Introduction to Analysis I. **Three hours.** I.
Prerequisite: MAT 213. MAT 410 recommended.

The real number system; sets and functions; limits; continuity, uniform continuity; multivariable differentiation; Taylor's theorem; laws of the mean; the Riemann-Stieltjes integral; allied topics.

MAT 430. Symbolic Logic. (CL PHI 430) **Three hours.** II.
Prerequisite: MAT 211 (CL PHI 211).

An advanced course in logic which examines in depth the meaning of statement connectives, the structure of the propositional calculus, quantification and set theory and the development of axiomatic systems.

MAT 453. (Formerly MAT 553). Differential Equations. **Three hours.** I, II.
Prerequisite: MAT 213.

Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations for higher order than the first; integration in series; total differential equations.

MAT 480. Seminar. **One hour.** II.
Prerequisite: Senior standing.

Individual investigation of selected topics; presentation and discussion of results; introduction to use of journals and other sources of material. Meets two hours weekly.

MAT 495. Independent Work. **Three hours.** I, II.
Prerequisite: Consent of Department.

Individual study and/or research on a problem or area of mathematics chosen by the student and the instructor. Regular consultation and final paper required. May be repeated once.

MAT 505. Foundations of Mathematics. **Three hours.** I.
Prerequisite: MAT 308 or consent of instructor.
Nature of mathematical thought; logical systems, postulational concepts and methods; consideration of the work of Hilbert, Peano, Whitehead, Russell, and others.

MAT 506. Number Theory. **Three hours.** II.
Prerequisite: MAT 308 or consent of instructor.
Fundamental properties of integers; linear Diophantine equations; linear and quadratic congruences; famous problems of number theory.

MAT 508. Modern Algebra I. **Three hours.** I.
Prerequisite: MAT 213 and 308, or consent of instructor.
Some fundamental concepts, sets, mapping, equivalence relations, operations; rings and integral domains; isomorphisms; some properties of the integers; fields with emphasis on construction of the various number systems; groups.

MAT 509. Modern Algebra II. **Three hours.** II.
Prerequisite: MAT 508.
Matrix algebra; vector spaces; systems of linear equations; linear transformations.

MAT 515. (Formerly MAT 415) Introduction to Analysis II. **Three hours.** II.
Prerequisite: MAT 414.
Infinite sequences and series, power series, series of functions, convergence, uniform convergence; introduction to vector analysis; line integration; multivariable integration; Fourier series; introduction to the Lebesgue integral; allied topics.

MAT 533. (Formerly MAT 333.) Non-Euclidean Geometry. **Three hours.** II.
Prerequisite: MAT 213 or consent of instructor.
Finite geometries; foundations of Euclidean geometry with investigations of the tacit assumptions of Euclid; Hilbert's postulates; Euclid's Fifth Postulate; discovery of Non-Euclidean geometry; hyperbolic plane geometry; elliptic plane geometry; consistency of the Non-Euclidean geometries.

MAT 550. Complex Analysis. **Three hours.** A.
Prerequisite: MAT 414 or consent of Instructor.
Complex numbers. Analytic functions and the Cauchy-Riemann Conditions, the geometry of elementary functions. Line integrals and the Cauchy-Goursat Theorem. Cauchy's Integral formual, Morea's Theorem and the Fundamental Theorem of Algebra. Power series, residues and poles.

MAT 556. Vector Analysis. **Three hours.** II.
Prerequisite: MAT 213 and PHY 202 or equivalent.
Algebra, geometry and calculus of vectors and applications.

MAT 571. Introduction to Numerical Analysis. **Three hours.** II.
Prerequisite: MAT 213 and 372 or equivalent.
Computer-oriented numerical methods course. Basic operations, computation, approximation, interpolation, numerical solution of equations, numerical integration, matrices and systems of equations, numerical solution of ordinary differential equations. Exhibits techniques available; attempts to derive the relevant formulas and consider the mathematical analysis. Out-of-class laboratory work required.

GRADUATE COURSES

MAT 607. Foundations of Secondary School Mathematics I. **Three hours.**
Designed for secondary school teachers of mathematics working toward the Master of Arts in Education Degree. Topics include: number and numeration; fundamental number theory; sets, relations, and functions; algebraic systems; consideration of these topics as they are likely to affect the modern high school mathematics program.

MAT 608. Foundations of Secondary School Mathematics II. **Three hours.**
Continuation of MAT 607. Topics include: history and development of geometry; logic and nature of proof; foundations of synthetic and analytic Euclidean geometry; discovery of non-Euclidean geometries; vector approaches to the study of geometry; consideration of these topics as they are likely to affect the mathematics program in the modern high school.

MAT 610. General Topology. **Three hours.** A.
Prerequisite: MAT 308 or consent of instructor.

Set theory, concept of a topological space. Bases and subbases for topological spaces. Separation axioms, continuity, homemorphisms and topological invarients. Connectedness, compactness, and product spaces.

MAT 611. Topics in Topology. **Three hours.** A.
Prerequisite: MAT 610.

A Continuation of MAT 610. Quotient spaces, compactification and Metrizability. An introduction to algebraic topology.

MAT 650. Measure and Integration. **Three hours.** A.
Prerequisite: MAT 515.

Review of topology in En. The Riemann Integral and its defects. Construction of Lebesgue measure in E. Measurable functions. The Lebesgue Integral in E and its extention in En. Convergence Theorems. Comparison of Riemann and Lebesgue Integrals. LP Theory and Fourier Series.

MAT 660. Topics in Algebra. **Three hours.** A.
Prerequisite: MAT 509 or consent of instructor.

Topics in groups, rings and fields. Introduction to homological and multilinear algebra.

MAT 690. Independent Study. **Three hours.** A.
Prerequisite: Graduate Standing with a minimum of nine semester hours in 600 level mathematics courses.

Independent study on a problem in mathematics chosen by the student and the instructor. A final paper is required. This course may be repeated one time.

MUSIC (MUS)

George Muns, Chairman; E. Baker. L. Baker, Bennett, Bonnemann, D. Cooper, Craig, Grose, Hartwell, Henrickson, Hensel, Hoagland, Lawson, T. Miller, F. Peterson, Staples, Stephenson, Surplus, E. Thomas, Vamos, Wolfrom, Zolla.

The student may choose from the following curricula:

The Bachelor of Music Education (teaching), with performance emphasis in voice, keyboard, string or wind instruments. A provisional high school certificate with endorsement for elementary teaching in both vocal and instrumental music is provided on completion of requirements in music as follows:

Theory, History and Literature
MUS 181, 182, 281, 282, 371, 372, 383 or 584, 480

Music Education and Techniques
MUS 366, ESH 457, ESH 458, ESH 378, ESH 379

Applied Major Instrument or Voice
Minimum of 7 semesters of study*

*Admission to upper division applied music study will be by general proficiency examination. Students will be expected to enroll for study in their major instrument during each semester of residence. The student will present the equivalent of a half recital before graduation. Recital must be pre-approved before presentation.

Applied Classes

MUS 130, 251, 351, 354, 320**

Secondary Piano***

MUS 110, 111, and 113 for Voice emphasis

***Admission to the Teacher Education Program will be granted after completion of this requirement or demonstrated proficiency in examination. Classes may be repeated for a maximum of two times. Policy should be applied retroactively.

**Instrumental students will take MUS 130, 251, and 351 for two semesters each, unless excused by proficiency examination. Voice or keyboard emphasis will omit MUS 354 with MUS 320 not required of voice students. MUS 130 required for two semesters for all emphases. Students required to take one semester of MUS 351 must enroll fall semester only.

Ensembles

Student must be enrolled in a major ensemble which reflects his major applied area during each semester of residence.

The Bachelor of Music* (non-teaching), with majors in voice, piano, organ, wind instruments, and church music. Music requirements as follows:

Theory

MUS 181, 182, 281, 282, 480, and 581, or 582, or 383

History and Literature

MUS 371, 372; 2-3 hours of electives from Upper Division courses; Church Music major required minimum of 3 hours of MUS 415, 416, 417, or 418

Applied Major Instrument or Voice**

Two hours credit per semester in 1st & 2nd years
Four hours credit per semester in 3rd & 4th years
Two hours credit for graduation recital
The Church Music Major will elect applied music for two hours per semester for four years.

*Students electing this degree program will be required to pass proficiency examinations in the major and secondary performance areas, and in keyboard, before final admission to this degree program is granted.

**During the junior year, a one-half recital is required; during the senior year, a full recital is required. Church Music major requires a one-half recital only.

Applied Secondary Instrument

Secondary Instrument selected to relate to Major Applied field and elected for one hour credit each semester for two years.

Related Courses

Piano, Organ & Voice Majors: MUS 550 & 551
Wind, String & Church Music Majors: MUS 550, 551, 383, 366

Ensembles

Each student must be enrolled in a major ensemble which reflects his major applied area during each semester of residence. Additional hours in chamber music, accompanying, opera workshop, at the recommendation of the Department of Music.

The Bachelor of Arts, with a First or Second Major in Music (teaching), Major in Music (non-teaching), or Minor in Music (non-teaching). Music requirements as follows:

FIRST MAJOR IN MUSIC (teaching)

Theory, History and Literature
MUS 181, 182, 371, 372

Applied Major Instrument or Voice
Minimum of 4 semesters of study

Secondary Piano
MUS 110, 111

Applied Classes
Keyboard—Vocal Major: MUS 320
Wind or String Major: MUS 130, 251, 351 for two semesters each, 354

Music Education and Techniques
MUS 366, ESH 378, 379, 457 (Instrumental), 458 (Voice or Keyboard)

SECOND MAJOR IN MUSIC (teaching)

The requirements for a second major are the same as for the first major except that ESH 457 and 368 are not required.

MAJOR IN MUSIC (non-teaching)

Theory
MUS 181, 182

History and Literature
MUS 371, 372

Minimum of 10 hours of electives in music

MINOR IN MUSIC (non-teaching)

Theory
MUS 181, 182

History and Literature
MUS 371, 372

Minimum of 4 hours of electives in music

BACHELOR OF MUSIC EDUCATION

with Voice or Keyboard Emphasis

The first two years may be found in the Central University College section.

Junior	**Hours**	**Senior**	**Hours**
EDF 317	4	Social Science Elective	3
ENG 209 or 211, 210 or 212	6	Science Elective	3
Science Elective	3	ELE 541, ESH 498, 499	17
MUS 351, 366	3	MUS 320, 383, 480	6
MUS 371, 372, ESH 378, 379	12	ESH 457, 458	4
MUS Applied & Ensemble	3	MUS Applied & Ensemble	1½
	31		34½

with Wind or String Emphasis

Junior	Hours	Senior	Hours
EDF 317	4	Social Science Elective	3
ENG 209 or 211, 210 or 212	6	Science Elective	3
Science Elective	3	ELE 541, ESH 498, 499	17
MUS 351 (both sems), 366	4	MUS 320, 354, 383 or 584	4
MUS 371, 372, ESH 378, 379	12	MUS 480, ESH 457, 458	7
MUS Applied & Ensemble	3	MUS Applied & Ensemble	1½
	32		35½

BACHELOR OF MUSIC

with majors in voice, piano, organ, wind or string instruments, and church music

Junior	Hours	Senior	Hours
ENG 209 or 211, 210 or 212	6	Science Elective	3
Social Science Elective	3	MUS 366, 499, or Elective	4
Science Elective	3	MUS 480, Literature Elective	6
FRE 101, 102, or Electives	6	MUS 550, 551, Electives	7
MUS 371, 372, ESH 378, 379	12	MUS 581, or 582, or 383	2
MUS Applied or Ensemble	9	MUS Applied or Ensemble	9
	33		31

GRADUATE STUDY IN MUSIC

Graduate study in music leads to the Master of Music Education degree. This graduate degree intends to prepare students for leadership roles in music education at all levels; to build a sound foundation for further graduate study leading to a doctorate; to further insight into the structure of music; to increase their knowledge of musical culture through intensive study of music literature; to provide them with a core of knowledge from the field of learning theory, philosophy of education, and curriculum development enabling them to use educational principles in guiding the musical growth of others.

The program of study includes required subjects in music education, teaching techniques, music history and literature, structure and organization of music, applied music, and related fields. Flexibility is provided for students to pursue particular interests in the field of music. The Standard Teaching Certificate will be recommended on completion of the program as outlined in a separate document.

Qualifications for admission and procedures for entrance may be found in the Graduate Bulletin. More detailed information may be obtained by writing the Department of Music or the Dean of the Graduate School.

APPLIED MUSIC

Instruction is given in individual lessons of one or two one-half hour periods each week. Applied classes meet two one-hour periods per week.

Recital Attendance. Attendance at university concerts and recitals is considered a part of each student's responsibility and is required. Unsatisfactory attendance, described in a separate document, will affect grades in applied music.

MUS 110. Class Piano. **One hour. I, II.**
Introductory course for vocal and instrumental students to meet piano requirements for secondary piano as follows: play simple piano accompaniments at sight; play easier choral 4-part folk songs and hymns; harmonize, at sight, simple tunes; exhibit reasonable competency in transposition. May be repeated for a maximum of two times.

MUS 111. Class Piano. **One hour. I, II.**
Prerequisite: MUS 110.
Continuation of MUS 110. May be repeated for a maximum of two times.
MUS 112. Piano. **One or two hours. I, II.**
One or two lessons per week.

MUS 113. Secondary Piano. **One or two hours. I, II.**
Prerequisite: MUS 111 or equivalent.
One or two lessons per week with emphasis upon accompaniments.
May be repeated for a maximum of two times.

MUS 122. Voice. **One or two hours. I, II.**
One or two lessons per week.

MUS 130. String Instrument Class. **One hour. I, II.**
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching strings in class and for training string section of a school orchestra. May be repeated for additional one hour credit.

MUS 132. String Instruments. **One or two hours. I, II.**
Applied instruction in violin, viola, violoncello, or string bass. One or two lessons per week.

MUS 142. Organ. **One or two hours. I, II.**
Prerequisite: Sufficient piano study to have reached a level of proficiency for playing Bach 2-part Inventions or the equivalent.
One or two lessons per week.

MUS 145. Brass Instruments. **One or two hours, I, II.**
Applied instruction in trumpet-cornet, French horn, baritone horn, trombone, or tuba. One or two lessons per week.

MUS 146. Woodwind Instruments. **One or two hours. I, II.**
Applied instruction in flute, oboe, clarinet, bassoon, or saxophone. One or two lessons per week.

MUS 147. Percussion. **One or two hours. I, II.**
Applied instruction in percussion instruments. One or two lessons per week.

MUS 251. Brass Instrument Class. **One hour. I, II.**
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching brass instruments in band or orchestra. Examination of materials suitable for beginning instrumental programs. May be repeated for additional one hour credit.

MUS 312. Piano. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or equivalent. One or two lessons per week.

MUS 320. Class Voice. **One hour. I, II.**
Basic vocal techniques with emphasis on developing the voice for solo and/or choral use.

MUS 322. Voice. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or the equivalent. One or two lessons per week.

MUS 332. String Instruments. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or equivalent.
Applied instruction in violin, viola, violoncello, or string bass. One or two lessons per week.

MUS 342. Organ. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music and four semesters of MUS 142, or equivalent.
One or two lessons per week.

MUS 345. Brass Instruments. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or equivalent.
Applied instruction in trumpet-cornet, French horn, baritone horn, trombone, or tuba. One or two lessons per week.

MUS 346. Woodwind Instruments. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or equivalent.
Applied instruction in flute, oboe, clarinet, bassoon, or saxophone. One or two lessons per week.

MUS 347. Percussion. **One, two or four hours. I, II.**
Prerequisite: Junior standing in music, or equivalent.
Applied instruction in percussion instruments. One or two lessons per week.

MUS 351. Woodwind Instrument Class. **One hour. I, II.**
Practical instruction in methods of fingering, care of instruments, tone production and tuning. Group instruction to prepare for teaching woodwind instruments in band or orchestra. Examination of materials suitable for beginning instrumental programs. May be repeated for additional one hour credit.

MUS 354. Percussion Class. **One hour. I, II.**
Emphasis on snare drumming, rudiments, teaching techniques. Experience on all related percussion instruments: bass drum, tympani, and others. Some experience with mallet instruments: marimba, xylophone, bells, and others.

MUSIC ENSEMBLES

Performing ensembles are open to all students enrolled in the University and to qualified persons not enrolled. Interested persons and students are invited to participate and should contact the director of each activity to arrange for an audition.

MUS 125, 225, 325, 425. Choir. **One-half hour. I, II.**
Rehearsal and performance of choral literature of the highest standard. Sections include Concert Choir, Oratorio Chorus, Men's Glee Club and Women's Glee Club. Two or three rehearsals per week.

MUS 126, 226, 326, 426. Chamber Choir. **One-half hour. I, II.**
Rehearsal and performance of the finest music written for the small vocal ensemble. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 127, 327. Opera Workshop. **One-half hour. I, II.**
Preparation and presentation of opera scenes and complete works. All phases of performance and technical procedures of staging, costumes, and management.

MUS 135, 235, 335, 435. Orchestra. **One-half hour. I, II.**
Rehearsal and performance of the finest orchestra literature from the Baroque to the Contemporary eras. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 150, 250, 350, 450. Small Ensembles. **One-half hour. I, II.**
Rehearsal and preparation of literature for the following ensembles: (a) Chamber Orchestra; (b) Brass Choir; (c) Percussion Ensemble; (d) **Stage Band.**

MUS 155, 255, 355, 455. Band. **One-half hour.** I, II.

Rehearsal and performance of standard band literature. Band includes both symphonic and concert units. Concerts given both on and off campus. Three or more rehearsals per week.

MUS 156, 256, 356, 456. Marching Band. **One-half hour.** I.

Preparation and performance of marching band shows during the football season. Three or more rehearsals per week.

MUS 205. Chamber Music. **One-half hour.** I, II.

Study and performance of standard chamber music literature, quartets, quintets, etc. Open to pianists, vocalists, string and wind instrument players upon recommendation of instructor. Course may be repeated.

MUSIC (MUS)

MUS 101. Orientation to Music. **Two hours.** A.

Prerequisite: Consent of the department chairman.

Fundamentals of music theory and literature providing an enrichment experience for students contemplating careers in music. Required of all entering music majors who, through advising and evaluative procedures, demonstrate a need for a preparatory course to MUS 181.

MUS 181. Beginning Theory I. **Four hours.** I, II.

Teaches the perception and understanding of music through an integrated development of hearing, analytical, composition, singing, and keyboard skills. Achieved through the study of relatively simple, short structures of music from the Late Baroque to the Early Romantic periods.

MUS 182. Beginning Theory II. **Four hours.** I, II.

Prerequisite: MUS 181.

Continuation of MUS 181.

MUS 271. The Enjoyment of Music. **Three hours.** I, II.

Not open to music majors.

Designed to provide the general college student with a cultural background in music. Masterpieces of music, composers, and musical techniques are presented through listening materials and through concert attendance.

MUS 281. Intermediate Theory III. **Four hours.** I, II.

Prerequisite: MUS 182.

Continuation of MUS 182. Integrated skills further developed through the study of more difficult, longer structures of music from the Early Baroque to the Early Modern periods.

MUS 282. Intermediate Theory IV. **Four hours.** I, II.

Prerequisite: MUS 281.

Continuation of MUS 281.

MUS 360. Music Fundamentals for the Elementary Teacher. **Three hours.** I, II.

Open to Elementary Education Majors who have been admitted to the Teacher Education program.

Materials and methods designed to provide the elementary education major with an understanding of the terminology and structure of music. Reading, playing and listening skills prerequisite to the effective teaching of music taught through the use of literature used in the elementary school.

MUS 366. Conducting. **Two hours.** I, II.

Prerequisite: Junior standing in music.

Basic techniques of instrumental and choral conducting.

MUS 371. Music History I. **Three hours.** I.

Prerequisite: MUS 271, or permission of instructor.

Survey of music history from beginnings through the Baroque era.

MUS 372. Music History II. **Three hours.** II.
Prerequisite: MUS 271, or permission of instructor.
Survey of music history from Classic era to present.

MUS 383. Orchestration. **Two hours.** I, II.
Survey of ranges, timbre, and characteristics of orchestral instruments. Scoring for choirs and full orchestra.

MUS 415. Liturgics. **Three hours.** A.
Historical survey of the development of liturgies as background for the work of the church musician.

MUS 416. Hymnology. **Three hours.** A. ,
Development of the hymn; types of hymns and their uses; evaluation and effective use of materials in hymnals being used today.

MUS 417. Techniques and Materials for Church Choirs. **Three hours.** A.
Examination of sacred choral repertoire; study of conductor's skills and techniques; church choir administration.

MUS 418. Church Service Playing Techniques & Materials. **Three hours.** A.
Study and practical application of skills in accompanying anthems and oratorios, hymn playing, improvisation. Examination of repretoire for service playing.

MUS 480. Form and Analysis. **Three hours.** I, II.
Prerequisite: Junior standing in music.
Emphasis on materials of form; study of small part-forms with attention to motives, phrases, periods, cadences; compound forms; large instrumental forms; large and small vocal forms.

MUS 499. Recital. **Two hours.** II.

MUS 550. Teaching Techniques. **One or two hours.** I, II.
Analysis of current teaching methods and materials with the intention of developing sound teaching procedures. May include observation and performance. Topics announced in woodwinds, brass, percussion, strings, voice, piano and organ. May be repeated for credit maximum of two hours.

MUS 551. Performance Literature. **One or two hours.** I, II.
Study and analysis of literature for various performing media relative to performance practices and problems. Topics announced in woodwinds, brass, percussion, strings, voice, piano and organ. May be repeated for credit maximum of two hours.

MUS 555. Symphonic Music Literature. **Three hours.** I.
Prerequisite: MUS 371 and 372.
Evolution of the symphony from its beginning to the 20th century, with emphasis on score reading and listening.

MUS 556. Choral Music Literature I. **Two hours.** A.
Prerequisite: MUS 371 and 372.
Survey of choral music literature of the Renaissance and Baroque periods with particular emphasis on style and historical implications.

MUS 557. Choral Music Literature II. **Two hours.** A.
Prerequisite: MUS 371 and 372.
Choral music of the Classical, Romantic and Contemporary periods with particular emphasis on style and historical implications.

MUS 560. Introduction to Musicology. **Three hours.** I.
Systematic and historical musicology surveyed from the points-of-view of musical acoustics, musical psychophysiology, musical aesthetics, comparatology, theory-of-theory, musical historiography, music pedagogy and research in musicology.

MUS 563. Teaching Piano in Classes. **Two hours.** A.
Prerequisite: Three years of piano study at the college level, or the equivalent.
Methods and materials used in teaching of piano classes.

MUS 564. Advanced Instrumental Conducting. **Two hours.** A.
Prerequisite: MUS 366, or equivalent.
Designed to increase skills in score reading, preparation, interpretation and conducting of major orchestral or band works.

MUS 565. Advanced Choral Conducting. **Two hours.** A.
Prerequisite: MUS 366, or equivalent.
Conducting techniques and their application in choral rehearsal and performance.

MUS 571. Band Administration and Procedures. **Two hours.** A.
Problems in band administration, marching band techniques, band literature and conducting.

MUS 581. (Formerly MUS 381.) Counterpoint I. **Two hours.** A.
Survey of species. Writing in two, three and four parts with cantus firmus. Choral writing with the use of words. Analysis of Bach chorales and other polyphonic works. Writing of descants and canons.

MUS. 582. (Formerly MUS 382.) Counterpoint II. **Two hours.** A.
Characteristics of good melodic lines. Interplay of metrical, melodic and harmonic rhythms. Techniques of imitation, and thematic treatment. Writing in two, three and four parts using instrumental combinations. Analysis of Bach Inventions and other works in polyphonic style.

MUS 583. Composition. **Two hours.** A.

MUS 584. Scoring for Band. **Two hours.** A.
Primary course in instrumentation and arranging for the band medium, including scoring for small ensembles, marching band, concert band, and other combinations of wind and percussion instruments.

MUS 585. Choral Arranging. **Two hours.** A.
Introductory course in arranging for typical junior and senior high school vocal ensembles.

MUS 586. Workshop in Instrumental Music. **Two or three hours.** A.
Topics in band or orchestral procedures.

MUS 588. Pedagogy of Theory. **Two hours.** A.
Comparative study of theory systems with emphasis on presentation and illustrative exercises dealing with related theoretical problems.

GRADUATE COURSES

MUS 612. Piano. **One or two hours.** I, II.
Prerequisite: MUS 312. Four years or equivalent, as demonstrated by the student's proficiency on the instrument.

MUS 622. Voice. **One or two hours.** I, II.
Prerequisite: MUS 332.
MUS 632. String Instruments. **One or two hours.** I, II.
Prerequisite: MUS 322.
Graduate applied instruction in violin, viola, violoncello, or string bass.

MUS 633. Special Problems in String Teaching. **One to three hours.** A.
Specialized study of problems in studio or class teaching. Exposure to special techniques for successful teaching of skills at all levels.

MUS 642. Organ. **One or two hours.** I, II.
Prerequisite: MUS 342.

MUS 645. Brass Instruments. **One or two hours.** I, II.
Prerequisite: MUS 345.
Graduate applied instruction in trumpet-cornet, French horn, baritone horn, trombone, or tuba.

MUS 646. Woodwind Instruments. **One or two hours.** I, II.
Prerequisite: MUS 346.
Graduate applied instruction in flute, oboe, clarinet, bassoon, or saxophone.

MUS 647. Percussion. **One or two hours. I, II.**
Prerequisite: MUS 347.

MUS 672. Seminar in Music History. **One to three hours.** A.
May be repeated for maximum credit of three hours.

MUS 674. Supervision & Administration in Music Education. **Two hours.** A.
Functions, techniques and problems of supervision and administration in music education; development of effective music programs in city and county school systems; in-service education and workshop techniques; professional and community relationships.

MUS 675. (Formerly MUS 675 and 677.) Current Trends in Secondary Music. **Two hours.** A.
Overview of the music curriculum in the junior and senior high school; relationship of the general and specialized aspects of music in secondary schools; characteristics of adolescents and their implications for musical growth.

MUS 676. Current Trends in Elementary Music. **Two hours.** A.
Current thought and practices in elementary music; knowledge of the learner and the learning process, structure of music, and methods of developing skills related to a practical program of experiences designed to promote children's musical growth.

MUS 678. Principles of Music Education. **Three hours.** I.
Presentation and discussion of basic educational principles and their implications for music education, with reference to all types of school situations.

MUS 679. Foundations of Music Education. **Three hours.** II.
Historical, philosophical and psychological foundations of music education and their relationship to curriculum development.

MUS 680. Field Work in Music Education. **Two or three hours.** A.
Professional activities in the field under guidance and supervision of members of music department staff. Emphasis on curriculum improvement through student work on projects and problems faced in actual teaching situation. Selected readings pertinent to individual problems and needs.

MUS 681. Workshop in Music Education. **One to four hours.** Summer Only.
Philosophy, objectives, literature, materials, and techniques pertinent to a particular area, or areas, of music instruction. Topics to be announced. May be repeated for credit maximum of four hours.

MUS 683. Seminar in Choral Procedures. **Two hours.** A.
Study of techniques and methods involved in preparation and performance of choral music, including emphasis on choral arranging for the various voice classifications. Includes a survey of junior and senior high school literature.

MUS 684. Organization & Administration of Instrumental Music. **Two hours.** A.
History and roles of instrumental music; methods of program initiation, student recruitment and testing; organizational and administrative aspects of various instrumental groups; administrative procedures for property and library materials.

MUS 687. Analytical Techniques I. **Three hours.** A.
An intensive study of the structure of Renaissance, Baroque and Early Classic music.

MUS 688. Analytical Techniques II. **Three hours.** A.
Prerequisite: MUS 687 or permission of instructor.
An intensive study of the structure of Late Classic, Romantic and Modern music.

MUS 698. Research & Writing in Music. **Two hours.** A.
Overview of important research in music; sources and procedures for investigating problems in the field; development of bibliographies.

MUS 699. Thesis. **Three hours.** I, II.

PHILOSOPHY (PHI)

J. C. Cooper, Chairman; Cherrington, Edwards, Harris.

A student may major in Philosophy (non-teaching) by taking a minimum of 30 semester hours. The student must take PHI 110, 130, 211, 300, 301, and 480, plus three hours selected from PHI 240, 310, 340, or 440, six hours from PHI 350, 360, 370, and three hours selected from PHI 410, 430, 450, 490, 510, 520 or 530. Philosophy majors must take at least six hours of a foreign language at the intermediate level or above. It is recommended that a Philosophy major elect courses from a wide range of disciplines with as much concentration as possible on the theoretical foundations of these areas. Courses in Sociology, Political Science, History, Literature, Drama, and Mathematics are highly recommended.

A student majoring in Philosophy wishing to minor in an area outside the College of Arts and Sciences must secure the permission of the Philosophy Department and the Dean of the College of Arts and Sciences.

A minor may be achieved by successful completion of 18 hours in Philosophy, including PHI 110, 130, 211, 300, and 301, plus 3 hours selected from upper division courses approved by the Chairman of the Department of Philosophy.

The curriculum for a major in Philosophy (non-teaching), the first two years may be found in the Central University College section.

Junior	Hours	Senior	Hours
PHI 110, 130, or 211	3	Three courses upper division philosophy and PHI 480	9
Three courses from PHI 350, 360, 370, and 240, 310, 340, 440	9	Electives	21
Electives	18		
	30		30

PHI 110. (Formerly PHI 200.) Introduction to Philosophical Thought. **Three hours.** I, II.

The basic, introductory course in philosophy for lower division students. Examination of the question, "What is a philosophical problem?", and the analysis of philosophical terminology. A problem-oriented approach rather than a historical approach is followed.

PHI 130. (Formerly PHI 210.) Introduction to Moral Philosophy. **Three hours.** I, II.

An examination of the meaning of a moral problem within the wider area of value theory. Particular attention is given to several representative positions including the ethical theories of Plato, Aristotle, Hume, Kant, and modern theorists.

PHI 211. (CL MAT 211) (Formerly PHI 200.) Introductory Logic. **Three hours.** I, II.

Principles of modern logic through the propositional calculus and elementary quantification. Attention paid to historical development and philosophical foundations of logic.

PHI 240. (Formerly PHI 330.) Introduction to the Philosophy of Religion. **Three hours.** I, II.

A study of the problems of belief and knowledge; the existence and nature of God and the character and meaning of religious commitment. Includes a philosophic analysis of religious language.

PHI 300. Survey of Philosophy I. **Three hours.** I, II.
The history of philosophical thought as seen through an examination of selected philosophers from Ancient Greece to Augustine.

PHI 301. Survey of Philosophy II. **Three hours.** I, II.
The history of philosophical thought as seen through an examination of selected philosophers from Aquinas to Kant.

PHI 310. Ethical Theory. **Three hours.** I.
Prerequisite: PHI 130 or consent of the Instructor.
A concentrated treatment of the meaning of a moral problem within the wider area of value theory and the concept of the person in continuation of PHI 130. Care is also given to expand the students' knowledge of ethical writers.

PHI 340. Philosophies of India. **Three hours.** II.
A survey of the historical development of religion and philosophy in India as it emerged in the Sacred Writings including the Mantras, the Brahmanas, the Upanishads and the Bhagavadgita.

PHI 350. Contemporary Philosophy I. (Formerly PHI 358 and PHI 458.) **Three hours.** I.
Prerequisite: PHI 130 or consent of instructor.
An analysis of some of the main problems which have exercised British Philosophers in the Twentieth Century, e.g., Russell, Moore, Austin, Wittgenstein and Ryle.

PHI 360. Contemporary Philosophy II. (Formerly PHI 459.) **Three hours.** II.
Prerequisite: PHI 130 or consent of instructor.
Origins of the phenomenological movement on the continent in the Nineteenth Century, its classical statement in the writings of Edmund Husserl, and its subsequent development in the existentialism of Sartre, Heidegger, Camus, and Merleau-Ponty.

PHI 370. 19th Century Philosophy. (Formerly PHI 457.) **Three hours.** I, II.
Prerequisite: PHI 110 or PHI 300.
The main stream of philosophical thought in Britain and the continent after Kant to the beginning of the 20th Century. Includes a study of Fichte, Hegel, Schelling, and J. S. Mill.

PHI 398. (CL HIS 398) (Formerly PHI 498.) The Ideological Foundations of Western Civilization. **Three hours.** I, II.

PHI 399. (CL HIS 399) (Formerly PHI 499.) The Ideological Foundations of Western Civilization. **Three hours.** I, II.

PHI 410. Readings in American Philosophy. **Three hours.** I.
Prerequisite: PHI 301.
An analysis of representative writings of the major classical American philosophers, including Peirce, Royce, James, Dewey, Hocking, Whitehead, and Santayana. Attention will be given to the influence of Dewey and Whitehead on the American Educational Process.

PHI 430. Symbolic Logic. (CL MAT 430) **Three hours.** II.
Prerequisite: PHI 211 (CL MAT 211).
An advanced course in logic which examines in depth the meaning of statement connectives, the structure of the propositional calculus, quantification and set theory and the development of aximatic systems.

PHI 440. Philosophical Foundations of Religious Thought. **Three hours.** II.
Prerequisite: PHI 240.
A concentrated treatment of philosophical problems of religious belief and knowledge, in continuation of PHI 240.

PHI 450. Philosophy of Science. **Three hours.** I.
Prerequisite: Consent of the instructor.
An inquiry into the nature of science and its philosophical presuppositions. Particular emphasis will be placed on the nature of scientific revolutions, the justification of scientific theories and the role of science and technology in man's effort to understand himself and the world in which he lives.

PHI 480. Special Problems in Philosophy. **Three hours.** II.
Prerequisite: Consent of the instructor.
A detailed examination of the thought of one outstanding philosopher in the history of philosophy, whether ancient, medieval, modern or contemporary. The philosopher will be chosen by the instructor in accordance with his interests and professional competence and with the approval of the Department.

PHI 490. Independent Work in Philosophy. **Three hours.** A.
Prerequisite: Consent of the instructor.
Individual research and reading on a specific philosophical problem chosen by the student and instructor. Regular consultation and final paper required.

PHI 510. Aesthetics. **Three hours.** II.
Examination of the major philosophical theories of art and beauty and of the place of aesthetic language in the general area of value judgments. Plato, Aristotle, Hume, Kant, Hegel, and several lesser figures will be critically considered. (PHI 130 recommended preparation.)

PHI 520. Political Philosophy. **Three hours.** I, II.
An inquiry into the major forms of social control through political institutions and the use and meaning of key terms in the vocabulary of politics. Particular attention is given to the relationship of law and morality and the reconciliation of political obligation and personal freedom.

PHI 530. Seminar in Philosophy. **Three hours.** I.
Prerequisite: Consent of the Department.
An intensive and thorough examination of a subject selected by the instructor with the approval of the Department. Such subjects as Metaphysics and Epistemology as well as areas such as modern Process Thought would be offered.

PHYSICS (PHY)

T. M. George, Chairman; Faughn, Gilbert, Kuhn, Laird, Mahr, Teague, Young.

Requirements for a major (non-teaching) are PHY 201, 202 and a minimum of 24 hours in Physics numbered 300 and above. In addition, CHE 111, 112 are required and Mathematics courses necessary to meet prerequisites for Physics courses. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201.

Requirements for a major (teaching) are PHY 201, 202 and a minimum of 20 hours in Physics numbered 300 and above. In addition, CHE 111, 112 are required and Mathematics courses necessary to meet prerequisites for Physics courses. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201.

Requirements for a minor (non-teaching) are PHY 201, 202 and a minimum of eight additional hours of Physics numbered 300 and above. Courses should be selected in consultation with the Chairman. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201. In addition, nine hours of Chemistry are recommended.

Requirements for a minor (teaching) are PHY 201, 202 and a minimum of 11 hours of Physics numbered 300 or above. Courses should be selected in consultation with the Chairman. At the discretion of the Chairman, PHY 131 may be substituted for PHY 201. In addition, nine hours of Chemistry are recommended.

The preparatory curriculum for a major in Physics (teaching and non-teaching) for the first two years may be found in Central University College section.

Courses for the last two years (teaching) are as follows:

Junior	Hours	Senior	Hours
Biology Elective	3	ESH 498	4
CHE 111, 112	9	ESH 499	10
EDF 317	4	Humanities Elective	3
ENG 209 or 211, 210 or 212	6	PHY Elective	6
MAT 453	3	ESH 451	3
PHY 300	3	Social Science Elective	3
PHY 306	2	Elective	3
PHY Elective	5		
	35		32

Courses for the last two years (non-teaching) are as follows:

Junior	Hours	Senior	Hours
ENG 209 or 211, 210 or 212	6	Biology Elective	3
Foreign Language	6	Foreign Language	6
MAT 453	3	PHY Electives	10
PHY Electives	10	Electives	14
Social Science Electives	6		
	31		33

Graduate Study in Physics

The Physics Department offers the Master of Science with a major in Physics. The Physics Department in cooperation with the Graduate School and the College of Education also offers an emphasis in Physics applying toward the aster of Arts Degree in Education. The regulations for these advanced degrees may be found in the Graduate Catalog of Eastern Kentucky University.

PHYSICS (PHY)

PHY 100. Introduction to Modern Physics. **One hour. I.**
Broad introductory survey of aspects of modern physics.

PHY 107. Slide Rule Theory and Practice. **One hour. I, II.**
Designed to aid students in making mathematical computations easily and rapidly. Slide rule must be approved by instructor.

PHY 131. Elementary Physics. **Five hours. I, II.**
Prerequisite: One unit each of high school algebra and plane geometry.
Fundamental ideas of mechanics, heat and sound. Four lecture hours; three laboratory hours.

PHY 132. Elementary Physics. **Five hours. I, II.**
Prerequisite: PHY 131.
Fundamental ideas of electricity, magnetism and optics. Four lecture hours; three laboratory hours.

PHY 176. (Formerly GSC 176.) Physical Science (Physics). **Three hours.** I, II.
(Not open to students who have completed college laboratory courses in physics.)
A course designed to give the students whose primary interests are in other fields an understanding of some basic scientific problems and their importance in the scientific age. Topics on force, energy, heat, sound, light, electricity, magnetism, electrons, and nuclear phenomena give the student a broad view of the universe. Two lecture hours and two laboratory hours.

PHY 201. Mechanics, Heat and Sound. **Five hours.** I, II.
Corequisite: MAT 111.
Composition and resolution of forces, laws of equilibrium, Newton's laws of motion, work and energy, momentum, simple harmonic motion, hydrodynamics, heat phenomena, sound and wave motion. Four lecture hours: three laboratory hours.

PHY 202. Electricity, Magnetism and Optics. **Five hours.** I, II.
Prerequisite: PHY 201.
Electrostatics, nature of electricity, magnetism, Ohm's law, measurement of electrical quantities, sources of electrical energy, Lenz's law, inductance and capacitance, alternating currents, electromagnetic waves, optics. Four lecture hours; three laboratory hours.

PHY 220. Introduction to Mechanics of Solids. **Four hours.** A.
Prerequisite: PHY 201.
Corequisite: MAT 112.
Fundamental principles of mechanics, mechanics of deformable bodies, forces and movements transmitted by slender members stress and strain, tension, stresses due to bending. (Does not count toward a physics major.)

PHY 230. (Formerly MAT 321 or MAT 30.) General Astronomy. **Three hours.** A.
Development of astronomy as a science; development of the solar system; astronomical instruments; better known facts of astronomy. Three lecture hours per week. (Not available for credit toward a physics major.)

PHY 300. Modern Physics. **Three hours.** I.
Prerequisite: PHY 202 or consent of instructor.
Corequisite: MAT 112.
Introduction to some important theories and experiments of modern physics. Topics covered include: theory of special relativity, quantum effects, particle aspects of electromagnetic radiation, wave aspects of material particles, Rutherford scattering and the nuclear atom; structure of the hydrogen atom, many-electron atoms and electron spin, and x-ray spectra. Three lecture hours per week.

PHY 301. (Formerly PHY 515.) Modern Physics II. **Three hours.** II.
Prerequisite: PHY 300.
Instruments and accelerating machines used in nuclear physics, nuclear structure, radioactivity, nuclear reactions, elementary particles, introduction to molecular and solid state particles.

PHY 306. Classical Physics Laboratory. **Two hours.** I.
Prerequisite: PHY 202.
Laboratory experiments will be done in the classical fields of physics such as: mechanics, optics, electricity, and magnetism. Four laboratory hours per week.

PHY 307. Electronics. **Four hours.** A.
Prerequisite: PHY 202 or PHY 132.
Theory of thermionic tubes and solid state devices, rectifiers, amplifier circuit principles, modern pulse circuitry, the oscilloscope. Three lecture hours. Three laboratory hours.

PHY 308. Atomic and Nuclear Laboratory. **Two hours.** II.
Corequisite: PHY 301.
Performance of various experiments in Nuclear Physics, such as, radiation instruments, range and energy of particles, absorption, half-life, neutron moderators and neutron flux measurements, coincidence techniques. Four lab hours per week.

PHY 310. Methods of Mathematical Physics. **Three hours.** A.
Corequisite: MAT 213.
A study of physical applications of infinite series, complex numbers, determinants, matrices, partial differentiation, multiple integrals, vector analysis, ordinary differential equations.

PHY 502. Physical Optics. **Three hours.** A.
Prerequisite: PHY 202 or consent of instructor.
Corequisite: MAT 112.
Wave motion, reflection and refraction, further study of lenses, the telescope, dispersion, facts concerning the spectrum, interference, diffraction, plane polarized light, the electromagnetic theory of light, the quantum theory, origin of spectra. Three lecture hours per week.

PHY 503. Thermodynamics. **Three hours.** A.
Prerequisite: PHY 202.
Corequisite: MAT 213.
Study of temperature, thermodynamic systems, ideal gases, First and Second law of Thermodynamics, Carnot cycle, Kelvin temperature scale, entropy.

PHY 506. Physics for High School Teachers I. **Three hours.** A.
Prerequisite: One year of college physics and consent of instructor.
Topics from general physics to prepare teachers to teach high school physics with ease and confidence. Topics from advanced and modern physics to impart extra knowledge and a greater understanding. Two lecture hours; three hours laboratory and discussion.

PHY 507. Physics for High School Teachers II. **Four hours.** A.
Prerequisite: PHY 506 or consent of instructor.
Continuation of PHY 506. Two hours lecture; three hours laboratory and discussion.

PHY 508. Topics in Physics for Teachers. **Four hours.** A.
Topics from general physics selected to aid the high school teacher to teach with greater confidence. Three lecture hours; three hours laboratory and discussion.

PHY 510. Special Problems in Physics. **One to three hours.** A.
Prerequisite: PHY 202 and PHY 306.
Working out of special laboratory experiments, development of new equipment, or solution of special mathematical problems related to physics.

PHY 511. Special Problems in Physics. **One to three hours.** A.
Prerequisite: PHY 202 and PHY 306.
Continuation of PHY 510.

PHY 516. (Formerly PHY 304.) Electricity and Magnetism I. **Three hours.** A.
Prerequisite: PHY 202.
Corequisite: MAT 453.
Introduction by means of calculus and vectors to formulation and use of principles of classical electricity and magnetism. Covers electric fields and potentials, capacitance, direct and transient currents, alternating currents. Three lecture hours per week.

PHY 517. Electricity and Magnetism II. **Three hours.** A.
Prerequisite: PHY 516.
Continuation of PHY 516. Covers dielectrics, resistance, thermo-electricity, electromagnetic induction, magnetic properties of matter, Maxwell's equations. Three lecture hours per week.

PHY 558. (Formerly PHY 455 and MAT 455.) Classical Mechanics I. **Three hours.** A.
Prerequisite: PHY 202.
Corequisite: MAT 453.
Introduction by means of calculus to formulation and use of principles of classical mechanics. Covers force and motion of particles, work, Newton's Law of Gravitation, free and forced harmonic oscillations, translational and rotational motion of rigid bodies, wave motion. Three lecture hours per week.

PHY 559. Classical Mechanics II. **Three hours.** A.
Prerequisite: PHY 558.
Continuation of PHY 558. Covers central forces, generalized coordinates, LaGrange's equations, Hamilton's equations, vibrating systems and normal coordinates. Three lecture hours per week.

PHY 570. Quantum Mechanics. **Three hours.** A.
Prerequisite: PHY 558.
Basic principles of wave mechanics, solutions of Schrodinger wave equation for simple systems. Interpretation of solutions and application to atomic and molecular problems. Three lecture hours per week.

GRADUATE COURSES

PHY 601. Advanced Mathematical Physics. **Three hours.** A.
Prerequisite: MAT 453.
Physical applications of Fourier series; calculus of variations; gamma, beta, and error functions; coordinate transformations; tensor analysis; function of a complex variable; series solutions to differential equations; integral transforms, partial differential equations; probability. Three lecture hours.

PHY 605. Solid State Physics. **Three hours.** A.
Prerequisite: PHY 559.
Space lattices and crystal types; x-ray crystal analysis, dynamics of crystal lattices; thermal properties of crystals; free electron theory of metals; quantum theory of electrons in periodic lattices, semiconduction. Three lecture hours.

PHY 606. Selected Topics in Physics for Teachers I. **Three hours.** A.
Prerequisite: Consent of instructor.
Intensive study of topics in physics selected from the following fields: Mechanics, Thermodynamics, Sound, Electricity, Magnetism, Optics, and Modern Physics. Selection will depend upon the needs of the students enrolled in the course. Two lecture hours; three hours laboratory and discussion.

PHY 607. Selected Topics in Physics for Teachers II. **Three hours.** A.
Prerequisite: Consent of instructor.
Intensive study of topics in physics selected from the following fields: Mechanics, Thermodynamics, Sound, Electricity, Magnetism, Optics, and Modern Physics. Selection will depend upon the needs of the students enrolled in the course. Care will be taken not to duplicate subjects in PHY 606. Two hours lecture; Three hours laboratory and discussion.

PHY 615. Advanced Nuclear Physics. **Three hours.** A.
Prerequisite: PHY 570.
General properties of the nucleus; two body scattering problems; nuclear forces; nuclear models; theory of nuclear reactions; theory of beta decay. Three lecture hours.

PHY 630. Electromagnetic Theory I. **Three hours.** A.
Prerequisite: PHY 517.
Detailed treatment of electrostatics; potential theory dielectic, magnetostatics and steady state current problems. Maxwell's equations; their solutions in dielectic and conducting media. The wave equation and plane waves. Three lecture hours.

PHY 631. Electromagnetic Theory II. **Three hours.** A.
Prerequisite: PHY 630.
The inhomogeneous wave equation; special relativity; covarient formulation of electrodynamics; retarded potentials and gauge transformations; radiation from a Hertz oscillator; multipole radiation; Hamilton's formulation of Maxwell's equations. Three lecture hours.

PHY 640. Electronics II. **Four hours.** A.
Prerequisite: MAT 453, PHY 307.
Theory of solid state devices; rectifiers; amplifiers; oscillators; pulse and digital circuits; Three lecture hours; Three laboratory hours.

PHY 660. Advanced Classical Mechanics I. **Three hours.** A.
Prerequisite: PHY 559.
Lagrange's equations; variational principles; the two body problem; rigid body mechanics; special relativity. Three lecture hours.

PHY 661. Advanced Classical Mechanics II. **Three hours.** A.
Prerequisite: PHY 660.
Hamilton's equations; canonical transformations; Hamilton-Jacobi theory; normal coordinates; small oscillations; Lagrange's and Hamilton's formulation for continuous systems and fields. Three lecture hours.

PHY 662. Statistical Mechanics. **Three hours.** A.
Prerequisites: PHY 559, PHY 503.
Systematic derivation of thermodynamic formulae; Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics; ensemble theory; distribution functions and partition functions; fluctuations; applications to gases and solids.

PHY 671. Intermediate Quantum Mechanics. **Three hours.** A.
Prerequisite: PHY 570.
Schroedinger wave equation; eigenfunctions and eigenvalues; energy levels; collision theory. Three lecture hours.

PHY 680. Special Topics in Physics. **1-3 hours.** A.
Specially-assigned theoretical or experimental work on problems not covered in other courses.

PHY 690. Thesis Research. **1-6 hours.**
Prerequisite: Approval of thesis-research advisor. Research in physics followed by the preparation of a thesis under the guidance of the research advisor. This course may be repeated but a maximum of only six hours of credit may be applied toward a degree.

POLITICAL SCIENCE (POL)

D. B. Pettengill, Chairman; Fretty, Gunn, Gurganus, Kline, Kwak, Ogden, Ringwall, Vance.

A student may major in Political Science (teaching or non-teaching) by taking a minimum of 30 semester hours. The student must take POL 100, 101, and six hours from 201, 202, or 203. POL 301, and one course at the 400 level are strongly recommended. At least fifteen hours must be taken in upper division courses and three of these hours must be in political theory. A Political Science major should take twelve hours in a foreign language if he begins the language in college, or six hours if he continues the language at the intermediate level.

It is recommended that a Political Science major take a minor in another social science or in English. Students who plan to pursue work toward an advanced degree are advised to acquire competence in statistics.

A student may minor in Political Science by taking a minimum of 18 semester hours. He must take POL 100 and 101. Nine hours must be in upper division courses. A total of 21 semester hours in Political Science is required for a teaching minor.

MASTER OF ARTS DEGREE IN POLITICAL SCIENCE:

The Master of Arts degree is offered as preparation for junior college teaching, as an intermediate degree for those who wish to continue their graduate careers, or, as preparation for advanced positions in government, industry and other areas of employment. The Department offers a Master of Arts degree in Political Science as a 30 hour program. Students may emphasize international relations, comparative government, public law, American political process, public administration, or political theory, but POL 600 and 645 are required. All students must pass a reading examination in a modern foreign language or substitute a requirement in statistics as determined by advisors.

For further information concerning the objectives and areas of course work, admission requirements, the Graduate Record Exam, comprehensive and oral examinations, as well as other pertinent matters, see the *Graduate Catalog.*

MASTER OF PUBLIC ADMINISTRATION:

The Department offers the degree of Master of Public Administration primarily for persons interested in government service. The minimum requirements for completion of the degree consist of 36 hours, competence in statistics, and completion of a supervised internship. The Institute of Government, an administrative unit of the Department, serves as the focus for many activities connected with the public administration offerings. For further information, see the *Graduate Catalog.*

MASTER OF ARTS DEGREE IN EDUCATION:

The regulations for the above degree may be found in the appropriate section of the *Graduate Catalog.*

Curricula for a major in Political Science (teaching and non-teaching). The first two years may be found in the Central University College section.

Courses for the last two years (teaching) are as follows:

Junior	**Hours**	**Senior**	**Hours**
EDF 317	4	Political Theory	3
POL electives	12	ESH 498, 499	14
General Education MAT or SCI	6	ESH 449	3
Electives (minor)	9	POL electives	6
Electives	3	Electives (minor)	6
	34		**32**

Courses for the last two years (non-teaching) are as follows:

Junior	**Hours**	**Senior**	**Hours**
POL electives	9	POL electives	6
Electives (minor)	9	Political Theory	3
Electives	14	Electives (minor)	9
		Electives	14
	32		**32**

POLITICAL SCIENCE (POL)

POL 100. Introduction to Political Science. **Three hours.** I, II.
Survey of the political characteristics of modern democracies and dictatorships and their relation to governmental institutions and practices, with emphasis on the government of the United States.

POL 101. Introduction to American Government. **Three hours.** I, II.
Principles, functions, and basic political institutions of the American system of government at the national level.

POL 201. Comparative Government. **Three hours.** I, II.
Permission of instructor.
Survey of the political characteristics of Great Britain, France, Germany, and the Soviet Union to introduce the student to the diversity of institutional forms and political forces.

POL 202. International Politics. **Three hours.** I, II.
Permission of instructor.
Introductory survey of basic principles and forces of international politics. Emphasis placed on the modern state system, nationalism, national power, balance of power, international economics, diplomacy, and world organization.

POL 203. American State and Local Government. (Formerly POL 103.) **Three hours.** I, II.

POL 101 or permission of instructor.
Study of the institutions and processes of government of the fifty states and of cities and counties.

POL 300. Survey of American Government. **Three hours.** A.
May not be taken for credit by students who have credit for POL 101. Designed as an elective at the junior and senior levels for non-majors who want a basic survey of American government.

POL 301. Research and Writing in Political Science. **Three hours.** I, II.
Prerequisite: Nine hours of Political Science or permission of instructor.
Practical application of techniques and methods used in collection, analysis and written presentation of political data.

POL 305. Local Government and Administration. **Three hours.** A.
Survey of history, legal basis, organization and the political and administrative functions and problems of counties, towns, special districts, municipalities and metropolitan areas.

POL 310. American Politics: Parties, Public Opinion and Pressure Groups. **Three hours.** I.
Prerequisite: POL 101.
Informal political institutions of American government: functions, organization, financing of political parties, public opinion and pressure groups. Their relationship to democracy.

POL 311. American Politics: President and Congress. **Three hours.** II.
Prerequisite: POL 101.
The legislative process and executive-legislative relations.

POL 320. Introduction to Public Administration. **Three hours.** I.
Prerequisite: POL 101 or 203.
A survey of organization, authority, decision-making, intra-organization communications and application of principles to the American bureaucracy by case studies.

POL 325. Soviet Foreign Policy. **Three hours.** II.
Prerequisite: POL 201 or permission of instructor.
Theoretical and practical considerations in the development, methods, and goals of Soviet foreign policy; Soviet relations with the Communist nations, the Western world, and the emerging nations.

POL 326. Government and Politics in the U.S.S.R. **Three hours.** I.

Prerequisite: POL 201 or permission of instructor.

A survey of domestic politics in the U.S.S.R. including the background and development of the Soviet system, the party-state structure, the policy-making process and power struggle, and relation of the system to Soviet society.

POL 330. Government and Business. **Three hours.** A.

Prerequisite: An introductory course in Political Science and three additional hours of Political Science, Economics, or American History.

Study of public control for consumer welfare; maintaining and moderating competition; substituting regulation and public ownership for competition. Emphasis on anti-trust laws and administrative agencies.

POL 355. The Political Systems of South America. **Three hours.** I.

Prerequisite: Six hours of Political Science or permission of instructor.

A survey of governmental institutions and political processes in South America. Attention focused on sociological, political, and economic factors. Emphasis placed on the political systems of Argentina, Brazil, and Chile.

POL 362. Government of Kentucky. **Three hours.** I, II.

Political setting, popular control of government, constitution, legislature, governor, courts, local government, finance, functions of government and relation to national government.

POL 375. International Organization. **Three hours.** A.

Prerequisite: POL 202 or consent of instructor.

Review of historical movements toward world order building, including evaluation of the League of Nations and study of United Nations. Modern movements toward regionalism and world federation.

POL 421. American Constitutional Law I. **Three hours.** I.

Prerequisite: Nine hours of Political Science.

Study of major provisions of the American Constitution and the way in which they have been interpreted by the Supreme Court. Supreme Court opinions read and analyzed.

POL 422. American Constitutional Law II. **Three hours.** II.

Prerequisite: Nine hours of Political Science.

Study of civil and political rights in the United States. Supreme Court opinions read and analyzed.

POL 440. Political Behavior. **Three hours.** A.

Prerequisite: Nine hours of Political Science including POL 310 or 311.

Introduction to research in political participation and other forms of behavior. Emphasis will be on the empirical method, especially as related to research design and analysis of data.

POL 445. The Politics of Totalitarianism. **Three hours.** A.

Prerequisite: Six hours of Political Science or permission of instructor.

A study of the theory, background, and practice of totalitarian systems and consideration of the usefulness of the totalitarian model in the study of comparative polities.

POL 450. The Political Systems of Continental Europe. **Three hours.** A.

Prerequisite: POL 201 or consent of instructor.

Survey of politics and governments of France, Germany, and Italy. Examination of political systems of nations that share the Roman or Germanic political heritage, in contrast to polities that have evolved from the Anglo-Saxon heritage or the eastern or Slavic environment. Students encouraged to engage in research on other continental polities.

POL 490. Independent Work in Political Science. **One-Three hours.** A.

Prerequisite: Consent of Department.

Individual research and/or reading on a problem or area within the field of political science chosen by the student after consultation with instructor. Regular reports and final research paper required. May be repeated for maximum of six hours credit.

POL 500. Practicum in Political Science. **1-3 hours.** A.
Prerequisite: 12 hours of political science.
A supervised field study program available only for political science majors. Assignments may be made to the General Assembly of Kentucky or to officials of local government in accordance with the requirements of special projects. May be repeated for maximum of six hours undergraduate credit.

POL 501. British Government and the Commonwealth. **Three hours.** I.
Prerequisite: POL 201 and either six additional hours of political science or six hours of English history, or graduate standing.
Study of constitutional system and political institutions of Great Britain. Attention to historical, geographical, social, and economic factors which influence the political system. Nature and development of the Commonwealth and significance of the Commonwealth for Great Britain are examined.

POL 505. Government and Politics of the Far East. **Three hours.** I.
Prerequisite: Nine hours of Political Science or graduate standing.
A consideration of the modern political systems of Japan, Korea, Communist China and Nationalist China or Formosa. Some attention will also be paid to the nations of Southeast Asia.

POL 510. American Foreign Policy. **Three hours.** II.
Prerequisite: Nine hours of political science or graduate standing.
Study of the processes and content of United States foreign policy.

POL 515. Workshop in International Affairs. **Three hours.** A.
Explores major problems in international affairs. Covers various areas of the world with reference to significant background factors and international problems of the people. Designed for secondary teachers in the social science field although open to other qualified students. Offered only during summer session.

POL 520. Workshop in Local Government and Politics. **Three hours.** A.
Focuses attention on major problem areas of Kentucky local government. A different area of concern will be explored each time the course is offered.

POL 530. Municipal Government and Administration. **Three hours.** II.
Prerequisite: Nine hours of political science.
Study of the powers, organization and current problems of municipalities and urban areas.

POL 535. The Political Systems of Mexico and the Carribbean. **Three hours.** A.
Prerequisite: Nine hours of political science or graduate standing.
An intensive analysis of governmental and political processes of Mexico, Cuba, and Central America. Attention focused on sociological, political, and economic factors.

POL 540. International Law. **Three hours.** A.
Prerequisite: POL 202 or permission of instructor.
A study of the nature and function of international law with regard to judicial solution of disputes among nations. Examination of the processes of growth and change in international law through cases in national and international courts, as well as strength and limitation of such laws.

POL 545. Theory of Public Administration. **Three hours.** A.
Prerequisite: POL 320 or permission of instructor.
This course identifies executive systems as expressed through individuals, small groups, and formal organizations; analyzes the functions, conditions and problems of executive value systems, activity and sentiment patterns. Action relationships in administration, administrative processes, and changes in executive systems from both historical and operational points of view are considered.

POL 555. History of Political Theory I. **Three hours.** I.
Prerequisite: Six hours in political science or graduate standing.
Survey of political thought from the time of Plato to the Reformation.

POL 556. History of Political Theory II. **Three hours.** II.
Prerequisite: Six hours in political science or graduate standing.
Survey of political thought from the sixteenth century to the present.

POL 557. American Political Thought. **Three hours.** I.

Prerequisite: Six hours in political science or graduate standing.

Intensive explorations of major currents in political thought which justified and guided the growth of the American republic. Largely organized on a chronological basis, but delves into main schools of thought that both reflected and energized the development of the American political process.

POL 560. The Judicial Process. **Three hours.** A.

Prerequisite: Permission of instructor.

A study of the development of legal and judicial systems from ancient times to the present day with particular emphasis on the Anglo-American experience.

POL 565. Administrative Law. **Three hours.** A.

Prerequisite: Permission of instructor.

Nature of the powers vested in administrative agencies; the problems of administrative procedure; and the methods and extent of judicial control over administrative action.

GRADUATE COURSES

POL 600. Research Methods in Political Science. **Three hours.** A.

Prerequisite: Graduate standing in political science. Bibliography and development of political science.

POL 625. Seminar in Civil Liberties. **Three hours.** A.

Prerequisite: Permission of instructor.

The nature and scope of political and civil rights and liberties in the United States. Selected topics will be studied in depth.

POL 630. Seminar in the Political Process. **Three hours.** A.

Prerequsite: Permission of instructor.

Examination of theories of community power structure; analysis of political activity by pressure groups; legislative process; survey and evaluation of sources for political information. Conducted through discussion of problems arising in relationship between educational institutions and political affairs.

POL 635. Seminar on Intergovernmental Relations. **Three hours.** A.

Prerequisite: Permission of instructor.

Study of adoption, maintenance, and operation of the American federal system. Attention forcused on different interlevel and inter-jurisdiction relationships within the system to analyze its development and ability to deal with current problems.

POL 640. Problems of Metropolitan Areas. **Three hours.** A.

Prerequisite: Permission of instructor.

Study of issues—economic, social and especially political—confronting our rapidly expanding metropolitan areas and regions. Proposed plans for possible amelioration of conditions examined.

POL 645. Seminar in Modern Political Theory. **Three hours.** A.

Prerequisite: Permission of instructor.

Principles of political theory and the present theory of relationships between authority and individualism.

POL 650. Public Administration Internship. **3-12 hours.** A. May be repeated for a total of 12 hours.

Prerequisite: Graduate standing in public administration.

Students will work under Department supervision in an office or with an official of a public agency or local government. A written report must be submitted to earn credit.

POL 655. Seminar in International Relations. **Three hours.** A.

Prerequisite: Permission of instructor.

An inquiry into contemporary problems of international affairs; the nation-state system and concepts of national interest in modern politics; the forms and distribution of power by which states seek to implement national interests; the making of foreign policy and methods of adjusting international conflict.

POL 660. The Politics of Developing Nations. **Three hours.** A.
Prerequisite: Permission of instructor.
Comparative analysis of political institutions, processes, and behavior in selected countries of South Asia, Africa, and the Near East. Special attention is given to the role of political ideologies and social forces in political modernization, and the involvement of these nations in world politics.

POL 665. Public Personnel Administration. **Three hours.** A.
Prerequisite: Permission of instructor.
Principles and problems of recruitment, examination procedures, rating, classification and assignment to the job, with the philosophies of pay, promotion, employee motivation and discipline analyzed. The process of formulating and administering public personnel policies; concepts and principles utilized in selecting governmental personnel systems. Focus upon American national, state and local personnel systems.

POL 675. Public Finance Administration. **Three hours.** A.
Prerequisite: Permission of instructor.
Interactions among the administrative, legal, and legislative aspects of the fiscal decision-making process at federal, state, and local levels.

POL 680. Public Management. **Three hours.** A.
Prerequisite: Permission of instructor.
A survey of the tools of analysis available to overhead functions of public management in key areas of decision; emphasis on personnel administration and manpower utilization, budgetary processes and fiscal controls, and several methods of administrative analysis—organizational studies, procedures engineering, information processing, and operations research.

POL 685. Seminar in Theory of Public Administration **Three hours.** A.
Prerequisite: Permission of instructor.

POL 698. Thesis I. **Three hours.** A.

POL 699. Thesis II. **Three hours.** A.

PSYCHOLOGY (PSY)

James A. Lee, Chairman; Aagard, Burks, Hindman, W. Knapp, Parkhurst, Riggs, Rottersman, Seyfrit, Watkins.

The fundamental involvement of psychological factors in all areas of human endeavor requires that Departmental curricula serve several purposes. Uppermost among these are:

A. Acquainting the student with the content and methods of systematic psychology.

B. Preparing the prospective graduate student for advanced work in professional and scientific psychology and/or related areas.

C. Offering areas of selective emphasis of content as service courses for minors and supporting preparation in other departmental curricula.

Prospective graduate students should take at least one year of foreign language; Russian, German or French is strongly recommended. Additional course work in biology, physics, chemistry, and mathematics is recommended.

The Department offers several different areas of selective emphasis for students in terms of their plans for work or continued study and/or professional application. These include general and systematic psychology, personality-social psychology, abnormal-clinical psychology and developmental psychology. Building a selective emphasis in cognate areas and upon the core requirements should be begun with the help of the student's advisor during the freshman year.

Curriculum for a major in psychology (non-teaching). The first two years of this curriculum may be found in the Central University College section.

Junior	**Hours**	**Senior**	**Hours**
PSY 301, 302, 313	10	PSY 499	3
GSC Electives	6	PSY Electives	9
PSY Electives	3	General Electives	18
General Electives	12		
	31		30

Recommendations for prerequisite options and departmental requirements* include the following:

(1) Six hours from GSC 162, BIO 141, 301

(2) MAT 107* and 3 hours from GSC 176, CHE 111

(3) Six hours from ANT 202, SOC 231, ANT 110, GSS 142, GSS 248

(4) Six hours of RUS, GER, or FRE

(5) PSY 211*, 213*, 301*, 302*, 313*, 499*, plus eleven hours of upper division courses in psychology.

Curriculum for a second major in psychology (teaching). Non-science majors pursuing a certification program should include ANT 110, SOC 231, and at least six hours from animal science, zoology, physics and/or physiology in their preparation. Non-teaching second majors fulfill the same general requirements as first majors.

Curriculum for a minor in psychology: Students majoring in another department will take PSY 211, 213, 301, and 498, plus six upper division hours elective coursework in psychology.

GRADUATE PROGRAMS

The Department of Psychology offers a Master of Science degree in psychology, with emphasis in either clinical psychology, or in school psychology. In addition, the Department offers minor work for students taking graduate major work in other departments.

The Graduate School section in this catalog describes general requirements for admission to the Graduate School. The Graduate Catalog details the specific program requirements for graduate major work in psychology.

Prerequisites to admission to the graduate psychology program are the completion of a minimum of five courses in psychology, including general psychology, statistics and experimental psychology and two others acceptable to the Admission Committee. Each program requires approximately two years of graduate preparation, including one full semester of internship experience. Prospective degree students should secure descriptive material from the department chairman.

PSYCHOLOGY (PSY)

PSY 211. General Psychology. **Three hours.** I, II.
Prerequisite: Sophomore standing.
Introduction to foundation concepts in the various areas of psychology. Prerequisite to all other psychology courses.

PSY 212. Applied Psychology. **Two hours.** I, II.
Human factors in social, personal and political decision. Manifestation of sensory, perceptual and motivational factors in medicine, law, industry and government. May not be counted toward a major or minor in Psychology.

PSY 213. Statistical Applications in Psychology. **Three hours.** I, II.
Prerequisite: PSY 211, and MAT 107 or equivalent.
Introduction to descriptive and inferential statistics used in ordering and interpreting data in psychology and other behavioral sciences.

PSY 301. (Formerly a part of 213.) Experimental General Psychology. **Three hours.** I, II.
Prerequisite: PSY 213.
Introduction to techniques and problems of the experimental method in psychology. Representative experiments and methodologies in psychology are considered to acquaint the student with research in contemporary psychology. Two lecture and two laboratory hours.

PSY 302. Tests and measurements. **Three hours.** I, II.
Prerequisite: PSY 211.
The principles of measurements with application to informal and standardized tests used in psychology, education, business, industry, and government. Problems of standardization, administration, scoring, and appraisal are considered.

PSY 305. (Formerly PSY 401.) Psychology of Personality. **Three hours.** I, II.
Prerequisite: PSY 211.
Basic approaches to the study of personality. Theory and fact upon which these approaches are related to various kinds of behavior patterns.

PSY 308. Abnormal Psychology. **Three hours.** I, II.
Prerequisite: PSY 211.
A descriptive study of the nature, cause, classification and prevalence of abnormal behavior, with attention to intellectual, personality, cognitive, sensory and motor functions.

PSY 311. Physiological Psychology. **Three hours.** I, II.
Prerequisite: PSY 301.
Facts, concepts and principles regarding physiological events that underlie behavior. Attention to contemporary research methods and problems undergoing study.

PSY 312. Child Psychology. **Three hours.** I, II.
Prerequisite: PSY 211.
Developmental study of physical, mental, personality and social structure and functions from conception to adolescence, including reference to the importance of parents, home, school and community to this development.

PSY 313. (Formerly PSY 300). Learning. **Four hours.** I, II.
Prerequisite: PSY 301.
Experimental study of learning, transfer, and retention processes with an analysis of various kinds of learning. 3 lecture and 2 laboratory hours.

PSY 314. Adolescent Psychology. **Three hours.** I, II.
Prerequisite: PSY 211.
The nature, sources and development of emotional, social, intellectual and personality patterns of behavior in adolescents.

PSY 315. Sensation and Perception. **Four hours.** I, II.
Prerequisite: PSY 301.
Experimental study of sensation and perception, the sensory and cognitive processes by which man knows his world. Three lecture and 2 laboratory hours.

PSY 400. Theories of Learning. **Three hours.** I.
Prerequisite: PSY 301 or consent of instructor.
In depth study of learning theories. Emphasis on contemporary developments and current research.

PSY 402. Industrial Psychology. **Three hours.** I, II.
Prerequisite: PSY 211.
Methods and principles of psychology as applies to business and industry. Emphasis is on employee selection, classification training and evaluation.

PSY 404. Motivation and Emotion. **Three hours.** II.
Prerequisite: PSY 301 or consent of instructor.
Study of biological and learned variables in motivated behavior including reflexes, instincts, imprinting, emotional, cognitive and other neuro-physiological phenomena.

PSY 498. Seminar in Psychology I. **Three hours.** I, II.
Prerequisite: Fifteen hours in psychology and consent of instructor.
Advanced study of the basic areas of psychological facts and theories library research into the expression of these principles in selected areas of the student's major areas of study. Recommended for psychology minors only.

PSY 499. Seminar in Psychology II. **Three hours.** I, II.
Prerequisite: Nineteen hours in Psychology and consent of instructor.
Intensive treatment of fundamental phenomena in psychology, toward a synthesis of contemporary theoretical approaches to these problem areas. Recommended for psychology majors only.

PSY 500. Social Psychology. **Three hours.** I, II.
Prerequisite: PSY 211.
The behavior of individuals in relation to personality, social, and cultural systems.

PSY 504. Psychology of Individual Differences. **Three hours.** I, II.
Prerequisite: PSY 211 and 302.
Study and application of the facts of human variability, including differences in such areas as age, sex, class, intelligence and achievement.

PSY 507. Problems in Psychology. **One-Three hours.** A.
Prerequisite: PSY 211, 213, and approval of instructor.
Qualified students may outline and study a definite problem in some area of psychology for one, two or three hours of credit. Amount of credit depends on nature and extent of the problem studied. Results must be presented in a formal paper.

GRADUATE COURSES

PSY 620. Statistics. **Three hours.** I.
Prerequisite: PSY 213.
Theory and practice in the analysis and interpretation of psychological measurements.

PSY 621. Proseminar I. **Two hours.** I.
Prerequisite: Consent of instructor.
Basic concepts, methods and current developments in selected areas of psychology.

PSY 622. (Formerly PSY 601.) Theories of Personality. **Three hours.** I, II.
Prerequisite: Consent of instructor.
Theories relating to structure, function and development of the individual to his dynamic behavior.

PSY 624. (Formerly PSY 617.) Individual Intelligence Testing. **Three hours.** I, II.
Prerequisite: Consent of instructor.

Theory, supporting evidence, and practice of individual measurement of intelligence, and communication skills.

PSY 625. Personality Assessment. **Two hours.** I.
Prerequisite: Consent of instructor.
History, theory, administration and interpretation of selected projective and non-projective personality tests.

PSY 626. Professional Concerns. **One hour.** I.
Prerequisite: Consent of instructor.
Consideration of ethical and related problems of psychologists.

PSY 640. Proseminar II. **Two hours.** II.
Prerequisite: PSY 621.
Continuation of Psychology 621.

PSY 641. Psychopathology and Abnormal Psychology. **Three hours.** II.
Prerequisite: PSY 622.
Description of symptoms and dynamics of psychological disorders with consideration of cause, development, modification and prevention.

PSY 642. Projective Techniques. I. **Three hours.** II.
Prerequisite: PSY 624.
History, theory, and rationale of projective techniques; administration and interpretation of the Thematic Apperception Test; and some familiarity with the Rorschach Inkblot Test.

PSY 643. Practicum I. General. **Three hours.** II.
Prerequisite: PSY 624 and 642.
Supervised practice in individual intelligence testing and personality assessment.

PSY 644. Counseling and Psychotherapy. **Three hours.** I.
Prerequisite: PSY 641 or consent of instructor.
Theories, principles and techniques, for individual and group therapy. Two hours lecture, 2 hours supervised laboratory practice in therapeutic intervention. Approaches will include Behavior Modification, Non-Directive Counseling and/or Reconstructive Psychotherapy, in campus facilities and/or community agencies.

PSY 660. Practicum II. Clinical Psychology. **Two hours.** A.
Prerequisite: PSY 643, 644, 661.
Supervised practice in counseling/psychotherapy and advanced testing to include Rorschach Inkblot Test.

PSY 661. Projective Techniques II: Clinical Psychology **Three hours.** I.
Prerequisite: PSY 641, 642.
A continuation of Rorschach theory, method, practice and interpretation.

PSY 662. Research I. **Two hours.** A.
A laboratory course devoted to instrumentation, formulation of problems and orientation to research methods.

PSY 663. Practicum II. School Psychology. **Two hours.** I.
Prerequisite: PSY 643, 644.
Supervised practice in counseling/psychotherapy and advanced testing.

PSY 680. Advanced Child and Exceptional Child. **Two hours.** I.
Prerequisite: PSY 622, 640.
Theoretical issues and practical problems in intellectual, social, perceptual, physical and personality development with implications for education and adjustment.

PSY 681. Principles of Learning and Motivation. **Three hours.** I.
Prerequisite: PSY 640.
Principles and supporting evidence in each area with emphasis on human application.

PSY 632. Social, Cultural and Family Dynamics. **Three hours.** A.
Prerequisite: PSY 622, 640.
Interaction of the individual with groups to include the effects of family structure and minority status.

PSY 683. Advanced Tests and Measurements. **Two hours.** I.
Prerequisite: PSY 620 or 621.

Selected survey and application of group and individual tests used in both school and clinical settings.

PSY 684. Practicum III: Clinical Psychology. **Five hours.** II.
Prerequisite: PSY 660.

Supervised clinical practice toward assuming full responsibility for psychological evaluations and psychotherapeutic procedures.

PSY 685. Practicum III. School Psychology. **Three hours.** I.
Prerequisite: PSY 663.

Supervised experience toward assuming full responsibility for case evaluations, presentations and therapeutic procedures.

PSY 686. Research II. **Two hours.** I.
Prerequisite: PSY 662.

The investigation of independent problems under staff supervision.

PSY 687. Independent Work in Psychology. **One-Three hours.** A.
Prerequisite: Consent of instructor.

Student responsibility for conceptualization and investigation of research problem and drawing formal conclusions.

PSY 699. Internship. **Ten hours.** A.
Prerequisite: Consent of student's committee.

Intensive supervised practice in approved setting.

EKU

College of Business

……

Accounting . 278

Business Administration . 280

Business Education and Office Administration . 286

Economics . 292

COLLEGE OF BUSINESS

Joseph H. Young, Dean

The College of Business, in cooperation with the Graduate School, offers the degree of Master of Business Administration and, in cooperation with the Central University College, offers four-year programs leading to the degree of Bachelor of Business Administration.

The Department of Business Education and Office Administration, in cooperation with the College of Education, offers the Master of Arts in Education degree for teachers of business, a four-year program for secondary business teachers leading to the Bachelor of Science degree, and a two-year executive secretarial program leading to the Associate of Arts degree.

The programs in the College of Business are designed to provide professional education for careers in business and to develop an intellectual understanding of the role of the citizen in a rapidly changing technological society. Through the liberal arts requirements for the degree, the College attempts to provide for the student a well-rounded education.

The College offers courses in accounting, business education, business law, economics, data processing, finance, management and marketing. The specific programs are outlined in the departmental sections of the catalog. Each student upon transferring into the College of Business is assigned a faculty advisor especially trained in the requirements of the program he intends to pursue. Students changing programs should consult with the Dean for reassignment to an appropriate faculty advisor.

Students in the College of Business are eligible for financial aid and grants, as are all other students in the institution, and should contact the Financial Aids Office to inquire about them.

Pre-legal Study

Many students planning to attend law school find undergraduate programs in business particularly good background for their legal study. Special advisors are available in the College of Business for pre-legal students.

Admission to the College of Business

Freshmen enter the Central University College and remain there through their sophomore year. As they approach the completion of their sophomore year, they should apply for admission to the College of Business. The following are the requirements for admission:

1. Completion of a minimum of 64 credit hours with a grade point average of 1.8 or higher.

2. Completion of the following:
   GSE 101 and 102
   ENG 209 or 211 and 210 or 212
   GSP 180, 181 and 281
   GSS 142, 246, and 247

Science or Math, 6 hours (see page 49 for options)
Military Science (for men), 8 hours.

Requirements for Graduation

In order to be graduated with a Bachelor of Business Administration degree, students must apply to the Office of the Dean of the College of Business. December graduates should apply the preceding April, and May and August graduates should apply the preceding October. The requirements for the degree are as follows:

1. A minimum of 128 hours and a quality point average of 2.0. Candidates for degrees must earn 30 of the last 36 hours in residence at Eastern Kentucky University. Hours earned by correspondence study are accepted upon written approval of the Dean. However, not more than 25 per cent of the total hours offered for the degree may be in correspondence and/or extension work. A degree may not be awarded if less than 32 hours have been earned in residence at Eastern Kentucky University. Of the 128 hours for the degree, 43 must be earned in upper division courses (courses at the 300, 400, and 500 level).

2. Not more than 50 per cent of the work toward the degree may be taken in the College of Business.

3. Completion of the business core.

4. Completion of sufficient course work in a major.

5. The two main objectives of the BBA degree are (1) professional development for business careers, and (2) broad liberal arts and science education. Electives which do not contribute to either of these objectives will not count toward the degree.

Major Requirements

Each student in the College of Business must choose a major field. Students should make this choice at the time they are admitted to the College of Business and the student must be approved by the department offering the major. The student's schedule for each semester must be approved by his faculty advisor. Any student not making satisfactory progress in his major may be required to change his major or to transfer from the College of Business. A grade of "C" or higher is required in each course for credit toward the major.

At least 12 of the hours in the major must be earned at Eastern Kentucky University. In addition, a 2.0 quality point average must be maintained in all work taken in the College of Business. A student may not take more than 64 hours in the College of Business without permission of the dean. For majors which are available and their requirements, see the various departments in sections of this bulletin devoted to course offerings. No minor or second major is recognized in the College of Business since students take the business core.

Required Subjects*

1. GSE 101 and 102
   GSS 246 and 247
   GSP 180, 181, and 281
   ENG 209 and 210 or 211 and 212
   Humanities, other than English, 6 hours
   Social Science, 6 hours
   Science or Math, 12 hours
   Military Science (for men), 8 hours

Accounting majors are required to include Mathematics 107 as a portion of the science and mathematics requirement.

2. The Business Core:
   ACC 108 and 109
   OAD 301 or 400 (at the election of the major department).
   ECO 230, 231, 324, and 391
   FIN 300
   GBU 300
   MGT 200
   MKT 300

*All of the options approved that meet these requirements are listed in the General Education section of this catalogue.

Teacher Certification

The Department of Business Education and Office Administration, in cooperation with the College of Education, provides programs leading to certificates qualifying graduates to teach business subjects in the high school. Students in these programs must have a quality point average of 2.25 on their entire record and also in their required area, or major, to be eligible for graduation and certification. Students following these programs may have portions of the business core requirements waived. Students interested in business teacher certification should consult the Chairman of the Department of Business Education and Office Administration.

MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM

Objectives

The College of Business, through the Graduate School, offers a program of graduate study leading to the Master of Business Administration degree. The program is broad in nature and is designed to develop general competence in the functions of management. It provides for study in breadth in selected functional areas and for concentrated study in a specialized field of the student's choice.

The Master of Business Administration degree program is designed to provide opportunities for developing:: skill in scientific analysis; the ability to integrate concepts and research findings of business and the behavioral sciences; to draw logically sound conclusions; to think creatively; to communicate effectively; and to appreciate the role and responsibilities of business enterprise in our broad social framework.

Admission to Study

An applicant for admission to study in the College of Business must (1) hold a bachelor's degree from an accredited institution with work comparable to a Bachelor of Business Administration degree, (2) have a 3.0 grade point average (on a four-point system), however, under certain conditions students whose grade point average is 2.75 or higher may be accepted conditionally for admission, and (3) make satisfactory scores on the Graduate Record Examination Aptitude Test for Graduate Study in Business.

Admission to Candidacy

Admission to candadacy is permitted if (1) all admission to study conditions and course deficiencies have been removed, (2) the student has achieved at least a 3.0 grade-point average for not less than nine nor more than eighteen hours of graduate level work in the College of Business, and (3) recommended by the student's Graduate Committee.

Requirements

At least thirty semester hours of work in the functional fields of accounting, economics, finance, management, and marketing as follows: (1) twelve semester hours in a concentration of study; (2) students taking a concentration of study in accounting must select three semester hours of work from each of three of the functional fields of economics, finance, management, or marketing; students taking a concentration of study in economics must select three semester hours of work from each of three of the functional fields of accounting, finance, management, or marketing; and students taking a concentration of study in one of the functional fields in business administration (finance, management, marketing) must select three semester hours of work from each of three of the functional fields of accounting, economics, and the remaining two functional fields in business administration; (3) at least six semester hours of courses selected from among Economics 604 Intermediate Statistical Methods [may not be applied in satisfaction of (1) above], Electronic Data Processing 508—Computer Information and Retrieval Systems—Cases and Problems, General Business 504—Administrative Policy, Office Administration 600—Business Research and Report Writing, or completion of a thesis for which six hours of credit will be earned. A committee to approve the thesis shall be appointed by the Chairman of the Graduate Committee of the College of Business.

No more than twelve semester hours of work from any functional area of study (exclusive of thesis credit) may be counted toward the degree. At least twenty-four semester hours of work must be completed in courses open only to graduate students.

All work for the Master of Business Administration degree must be completed within one eight-year period.

More detailed description of this program is presented in the Graduate Catalogue.

DEPARTMENT OF ACCOUNTING (ACC)

Claude K. Smith, Chairman; Brown, Dyer, French, Griffith, Jackson, Jones, Latham, McIlvaine, Messmer, Moore, Richard.

The Department of Accounting provides courses in principles of accounting required of all students obtaining a degree in Business. In addition, it has two programs for majors in accounting. The professional accounting program is designed to prepare graduates to enter an accounting firm in anticipation of work toward the CPA certificate. The industrial accounting major is designed for students who want careers in government or industry but who do not intend to seek the CPA designation.

The professional accounting program requires 21 hours of accounting above 109 and must include ACC 441. The industrial accounting major requires 21 hours of accounting above 109 and must include ACC 226. It is recommended that the industrial accounting major carefully select his course in consultation with the faculty advisor to improve his career effectiveness. Courses submitted toward the major must be completed with a grade of "C" or higher. No minors or second majors are available in the Department of Accounting.

The Department of Accounting, in cooperation with the Graduate School and the College of Business, participates in the Master of Business Administration Program. A student may take a concentration in accounting consisting of 12 hours of graduate level accounting courses. However, ACC 500 and 600 cannot be taken by students who have an undergraduate major in accounting. A detailed description of this program is presented in the Graduate Catalog.

Award

Each spring the outstanding junior on the professional accounting program is awarded the Yeager, Ford, and Warren Accounting Award. The award consists of a certificate of accomplishment and $100 provided by the Louisville firm of Certified Public Accountants, Yeager, Ford, and Warren.

ACCOUNTING (ACC)

ACC 108. (Formerly 124.) Principles of Accounting. **Three hours.** I, II.

Fundamental accounting relationships; completion of the accounting cycle; accounting process for merchandising enterprises; receivables, payables and inventories; deferrals, accruals and intangable assets.

ACC 109. (Formerly 125 and 126). Principles of Accounting. **Three hours.** I, II.
Prerequisite: ACC 108 or satisfactory completion of departmental examination.

Accounting systems, concepts, and principles; formation, organization, and operations of partnerships and corporations; departments and branches; and statement analysis.

ACC 225. Principles of Accounting-Intermediate. **Three hours.** I, II.
Prerequisite:

Accounting statements; the recording process; the periodic summary; cash and temporary investments; receivables; inventories; current liabilities; investments in stocks, bonds, funds, and miscellaneous items.

ACC 226. Principles of Accounting-Intermediate. **Three hours.** I, II.
Prerequisite: ACC 225.

The acquisition, use, and retirement of plant and equipment; depreciation, depletion, and revaluations of plant and equipment; intangible assets and deferred charges; long-term liabilities; capital stock; surplus; statements from incomplete data; errors and their correction; statement analysis; statement of application of funds.

ACC 300. Managerial Accounting. **Three hours.** I, II.
Prerequisite: ACC 109.

Accounting structure and systems; the uses and interpretation of financial statements; accounting and management control; and the uses of accounting in the decision-making process.

ACC 320. Principles of Accounting-Advanced. **Three hours.** I.
Prerequisite: ACC 226.

Partnerships-formation and operation; special partnership problems; joint ventures; statement of affairs; receivership; statement of realization; estates and trusts; and actuarial science.

ACC 321. Principles of Accounting-Advanced. **Three hours.** II.
Prerequisite: ACC 320.

Installment sales consignments; home office and branch relationships; corporate combinations; consolidated balance sheet; special problems with consolidated balance sheets; consolidated income and retained earnings statement; foreign branches and subsidiaries.

ACC 322. Income Tax Accounting. **Three hours.** I, II.
Prerequisite: ACC 126.

Income tax legislation-Federal and State; returns for individuals; gross income; basis and determination of gain or loss; capital gains and losses; dividends; deductions; withholding. Also includes a survey of income tax laws relating to partnerships, corporations, trust, and estate and gift taxes.

ACC 323. Advanced Tax Accounting. **Three hours.** I, II.
Prerequisite: ACC 322.

Federal income tax report preparation with emphasis on partnership and corporate returns, estate and trusts; gift and estate taxes; special problems in preparation of tax returns.

ACC 327. Cost Accounting. (Formerly ACC 227.) **Three hours.** I, II.
Prerequisite: ACC 109.

Cost flows and cost systems; the cost accounting cycle factory overhead; departmentalized manufacturing expenses; job order cost, process cost, and standard cost accounting; budgeting; and direct costing.

ACC 441. Auditing and Public Accounting Practice. **Three hours.** I, II.
Prerequisite: ACC 226.

Professional ethics; accountant's legal responsibility; internal control; preliminary arrangements for an audit; general procedure of an audit; the original records; the asset accounts; the liability accounts; operating accounts; the audit report.

ACC 500. Public School and Governmental Accounting. **Three hours.**
Prerequisite: Senior standing. Taught by announcement.

ACC 521. (Formerly ACC 421.) Fund Accounting. **Three hours.**
Prerequisite: ACC 109.

Advanced study in accounting and fiscal procedures for institutions and federal, state, county, and municipal governments.

ACC 525. (Formerly ACC 425.) Accounting Problems. **Three hours.**
Prerequisite: ACC 226.

This is an advanced course in accounting and the contents will be determined by the needs of the students registering for it. Taught by announcement.

ACC 527. Advanced Cost Accounting. **Three hours.**
Prerequisite: ACC 227.

Advanced problems in costs, budgets, distribution costs, measurements of departmental efficiency, and analysis of cost information for managerial decisions.

GRADUATE COURSES

ACC 600. Managerial Accounting. **Three hours.**
Prerequisite: ACC 109.

A study of accounting procedures and systems to provide data for managerial decision making. Subjects include planning, analysis of relevant cost, impact of taxes and limitations of data.

ACC 620. Controllership. **Three hours.**
Prerequisite: Graduate standing and 24 hours of accounting.

The place of the controller in management. Includes such subjects as quantitative techniques, systems, internal auditing, planning, taxes, insurance, and departmental relationships.

ACC 625. Advanced Auditing. **Three hours.**
Prerequisite: ACC 441.

Rules of professional conduct; auditing standards and case studies of American Institute of Certified Public Accountants; auditing rules and regulations of Securities and Exchange Commission; analysis of problem areas in reporting.

ACC 627. Research in Taxes. **Three hours.**
Prerequisite: ACC 323.

An intensive analysis of the Internal Revenue Code. Research and discussion of tax problems affecting business and of tax planning and saving opportunities from the point of view of the professional accountant.

ACC 628. Accounting Theory. **Three hours.**
Prerequisite: Strong accounting background.

History and theory of accounting as discussed in accounting literature, periodicals, research bulletins, and publications of professional organizations.

ACC 640. Seminar in Accounting. **Three hours.**
Prerequisite: Strong accounting background.

This course involves directed readings and intensive investigation into controversial and specific areas of accounting. Oral and written reports required.

ACC 698-699. Thesis. **Six hours.**
Individual direction of research and thesis writing.

BUSINESS ADMINISTRATION

Robert L. Hungarland, Chairman; Alford, Clyce, Hale, Harrison, Hibbard, Meeks, Patterson, Salter, Young.

The Department of Business Administration offers courses in finance, management, marketing, business law, general business, and electronic data processing leading to the Bachelor of Business Administration degree.

The Department of Business Administration also offers a concentration of work leading to the Master of Business Administration degree which is briefly summarized on the preceding pages. Refer to the Graduate Catalog for a more detailed explanation of the concentration of work in finance, management, or marketing.

There is a minor in Business Administration for students in colleges other than the College of Business. This minor consists of ACC 108, 109, ECO 230, 231, and six elective hours in Business Administration. This minor is provided primarily for students of the College of Applied Arts and Technology. Students in the College of Arts and Sciences require special permission from the Dean of the College of Arts and Sciences before such a minor is approved.

The electronic data processing major consists of 18 hours of EDP courses above the business core. All work for the major must be completed with a grade of "C" or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The finance major consists of 18 hours above the business core. Economics 492 may be counted toward the finance major. All courses submitted toward the major must be completed with a grade of "C" or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The general business major consists of 18 hours above the business core. The 18 hours consists of six credit hours in each of the fields of management, finance, and marketing above courses required in the business core. All courses submitted toward the major must be completed with a grade of "C" or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

A management major consists of 18 hours above the business core and must include Management 504. In addition to the management courses listed in this section, Economics 333, 597, 593 and OAD 560 may be counted toward the management major. All courses submitted for completion of the major must be completed with a grade of "C" or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

The marketing major consists of 18 hours above the business core and must include either Marketing 500 or 504, Economics 394 and Finance 320 may be counted toward the marketing major. All courses submitted for the major must be completed with a grade of "C" or higher. At least 12 of the hours in the major must be earned at Eastern Kentucky University.

ELECTRONIC DATA PROCESSING (EDP)

EDP 312. Introduction to Data Processing Systems. Three hours. I.
Prerequisite: Junior standing or by permission of instructor.
Introduction to the history and development of electro-mechanical and electronic computer systems, including machine functions, computer organization, conceptual programming, systems, and uses of computer systems in management. Three hours lecture and limited laboratory time for demonstrations.

EDP 320. (Formerly 410.) Assembly Languages. **Three hours.** II.
Prerequisite: Senior standing.
Study of instruction codes, input-output, macros, machine representation of characters, control, arithmetic and logic operation, subroutines, indexing and indirect addressing, assembly systems, and current advances in computer organization. Three lecture and two hours laboratory.

EDP 330. (Formerly 420.) Business Systems. **Three hours.** II.
Prerequisite: Senior standing.
Study of business systems; management organization of systems analysis, systems functions, concepts and programs, analysis and design, application feasibility studies, information retrieval, and systems planning and control. Three hours lecture.

EDP 440. FORTRAN Programming. **Three hours.** II.
Prerequisite: EDP 320 and Economics 391.
Introduction to FORTRAN; and history, structure, formula expressions, uses in business and format instructions. Advanced problems on the H-200 computer systems. Three lecture and two laboratory hours.

EDP 450. COBOL Programming. **Three hours.** I.
Prerequisite: EDP 320.
Introduction to COBOL; and history, structure, formula expressions, uses in business and format of instruction. Advanced problems on the H-200 computer system. Three lecture and two laboratory hours.

EDP 460. Input-Output Techniques. **Three hours.** II.
Prerequisite: EDP 320.
Theory of data handling; keytapes, optical readers, bar-code readers, paper tape, disc storage; remote terminals; and teleprocessing.

EDP 470. EDP Applications. **Three hours.** II.
Prerequisite: EDP 450.
Complex systems analysis and programming problems.

EDP 504. Electro-Mechanical Systems. **Three hours.** I.
Prerequisite: Senior or graduate standing.
Functional applications of business problems with specific utilization of electromechanical equipment. Three hours lecture and two hours laboratory.

EDP 506. Computer Programming. **Three hours.** I.
Prerequisite: Senior or graduate standing.
Application of computer technology to selected business problems utilizing a computer system. Three hours lecture and two hours laboratory. May not be taken for credit if credit has previously been received in 320, 330, 440, or 450.

EDP 508. Computer Information and Retrieval Systems—Cases and Problems. **Three hours.** II.
Prerequisite: Senior or graduate standing.
Readings, cases, and problems in programming conceptual business situations for records analysis and management decision-making with emphasis on systems logic and management control.

FINANCE (FIN)

FIN 300. Business Finance. **Three hours.** I, II.
Prerequisite: Junior standing.
Acquisition of funds; sources of permanent types of capital, sources of temporary types of capital, practices of short-term credit institutions. Management of corporate net income. Alteration of financial structure.

FIN 304. Financial Institutions. **Three hours.** I.
Prerequisite: Junior standing.
Sources and uses of funds; savings and loan institutions, insurance companies, pension funds, trusts, and other financial intermediaries. Analysis of the impact of this area of financial operations on the economy.

FIN 308. Commercial Banking. **Three hours.** I.
Prerequisite: Junior standing.
Problems of commercial banking discussed from the point of view of bank management; size of asset reserves, credit analysis, investment policies. Problems of equity reserves and capital account.

FIN 320. Principles of Risk and Insurance. **Three hours.** I, II.
Prerequisite: Junior standing.
Principles and coverages of insurance. Methods of risk assumption; fire insurance, transportation insurance, casualty insurance, life insurance, fidelity and surety bonds.

FIN 324. Investments. **Three hours.** I.
Prerequisite: Junior standing.
Characteristics of bonds, stocks, securities market, investment banking. Sources of investment information; interpreting financial news; taxation of securities; investors of limited means; analysis of securities.

FIN 420. Investment Analysis. **Three hours.** II.
Prerequisite: FIN 324.
Securities analysis; grading and selection of securities, management of individual and institutional portfolios. Case studies; oral and written reports by the student.

FIN 460. Public Finance and Taxation. **Three hours.** II.
Prerequisite: Senior standing.
Distribution of government burdens; property tax, shifting and incidence of taxation, income tax, death and gift taxes, taxes upon business, consumption taxes, motor vehicle taxes, poll tax, social security taxes, taxes on natural resources, and non-tax revenue.

GENERAL BUSINESS (GBU)

GBU 300. Business Law. **Three hours.** I, II.
Prerequisite: Junior standing.
Law in general; kinds of law persons, torts, contracts, personal property, real property, and forms of business organization.

GBU 302. Business Law. **Three hours.** II.
Prerequisite: Junior standing.
Bailments; sales of personal property; market practices, negotiable contracts, secured creditors, and labor relations.

MANAGEMENT (MGT)

MGT 200. Concepts of Modern Organization. **Three hours.** I, II.
Prerequisite: Sophomore standing.
Concepts of management in business organization and operation; universality of management functions; search for a practical philosophy of management; fundamental concepts in decision-making, planning, organizing, directing and controlling.

MGT 306. (Formerly MGT 304.) Managerial Systems Analysis. **Three hours.** I, II.
Prerequisite: MGT 200 and junior standing.
Introduction to concepts of selection, installation, operation, maintenance, and control of management systems.

MGT 320. Personnel Management and Industrial Relations. **Three hours.** II.
Prerequisite: MGT 306 and junior standing.
Personnel management in factory, store, and office; job analysis, description, and classification; personnel selection, maintenance, and training; promotion; labor turnover; wage policies; health and safety.

MGT 324. Collective Bargaining. **Three hours.** I.
Prerequisite: MGT 320.
Analysis of bargaining procedures; study of basic institutional issues in bargaining, economically related administrative clauses, strike and lockout tactics, and contract administration. Preparation, negotiation, and interpretation of labor contracts.

MGT 340. Production Management. **Three hours.** II.
Prerequisite: MGT 306 and junior standing.
Procedures and techniques employed in operations management. Managerial decision-making; statistical, linear programming, and general quantitative analysis applied in case problems.

MGT 410. Organization and Operation of the Small Business. **Three hours.** I, II.
Prerequisite: Junior standing.
Small business; organization, location, financial planning, records, unit costs, merchandising, credits, and personal policies.

MGT 412. Small Business Problems. **Three hours.** II.
Prerequisite: Junior standing.
Personnel management, business organization, policy and planning, wage payment, financial records and statements, purchases and sales, production control, and related problems.

MGT 440. Production Control. **Three hours.** I, II.
Prerequisite: MGT 340.
Control of time, quantity, and quality of operations. Routing, scheduling, dispatching, and control problems. Systems relationships in manufacturing, sales, and technical staff departments.

MGT 500. Human Relations in Business. **Three hours.** I.
Prerequisite: MGT 200 and senior or graduate standing.
Selected concepts from the behavioral sciences brought into a framework relevant to business decision-making. Examines social science research in decision-making by individuals and groups.

MGT 504. Administrative Policy. **Three hours.** I, II.
Prerequisite: MGT 200 and senior or graduate standing.
Issues in organization and structure of the business, employment policies, pricing policies, relations with governmental agencies, research and development policies, marketing strategy, and employer and stockholder relations.

MARKETING (MKT)

MKT 300. Marketing. **Three hours.** I, II.
Prerequisite: Junior standing.
Consumer buying. Marketing functions and institutions; direct selling, department stores, mail-order houses, chain stores, agricultural wholesaler, raw materials, cooperative marketing, speculation, price policies, brand policies, and ethical aspects of marketing.

MKT 304. Retailing. **Three hours.** I, II.
Prerequisite: Junior standing.
Location and arrangement of stores; organizational principles; personnel procedures; time procedures; merchandising principles; sales promotion.

MKT 308. Wholesaling. **Three hours.** II.
Prerequisite: Junior standing.
Distribution of goods from manufacturers to retailers; comparison of alternative methods; purchasing, transportation, and warehousing of goods; sales promotion of goods to the retailer.

MKT 310. Salesmanship. **Three hours.** I.
Prerequisite: Junior standing.
The art of selling; motive behind buying, attitudes of buyer and salesman, the interview, arousing interest, creating desire, answering objections, meeting excuses, diplomacy of the close, and types of customers.

MKT 320. Advertising. **Three hours.** I, II.
Prerequisite: Marketing 300.
Concepts of advertising; slogans, trademarks, layouts, and engraving. Scheduling of advertising; direct mail, outdoor and dealer display. Economic and legal aspects of advertising.

MKT 324. Advertising Copy and Layout. **Three hours.** II.
Prerequisite: MKT 320.
Advertising copy for various media. Art principles used in designing graphic and written advertising material.

MKT 420. Advertising Management and Cases. **Three hours.** I.
Prerequisite: MKT 320.
Advertising campaigns; research, planning, and coordination between advertising and selling efforts. Budgets, Trade area and media analysis campaigns.

MKT 450. Marketing Environments. **Three hours.** II.
Prerequisite: Senior standing.
Analysis of the firm environments, the forces of change, and their influence on marketing strategies and tactics. Emphasis on consumer behavior and on current contributions from the behavioral sciences.

MKT 500. Marketing Research and Analysis. **Three hours.** I.
Prerequisite: MKT 300 and senior or graduate standing.
Use of secondary research resources, building of bibliographies; preparation of reports for executives and clients.

MKT 504. Marketing Management. **Three hours.** II.
Prerequisite: MKT 300 and senior or graduate standing.
Policies and procedures in merchandising; selecting distribution channels; defining, locating, and reaching the market; determining marketing budgets; integratng advertising, personal selling, and sales promotion; using and evaluating market research.

GRADUATE COURSES
FINANCE (FIN)

FIN 600. Administrative Analysis in Finance. **Three hours.** S.
Prerequisite: Graduate standing.
Readings, problems, and study of current controversial issues with emphasis on decision-making in the financial administration of the firm.

FIN 698-699. Thesis. **Six hours.** I, II, S.
Individual direction of research and thesis writing.

MANAGEMENT (MGT)

MGT 600. Administrative Analysis in Management. **Three hours.** I.
Prerequisite: Graduate standing.
Examines the evolution of management concepts and philosophies. An analysis of the contributions of various philosophies in the synthesis of an eclectic philosophy of management.

MGT 620. Administrative Analysis of Complex Organizations. **Three hours.** II.
Prerequisite: Graduate standing.
Parallel analyses of administrative practices in business and government with emphasis on administrative theory. Stress placed on administrative practices observed in the functions of planning, organizing, directing, and controlling.

MGT 698-699. Thesis. **Six hours.** I, II, S.
Individual direction of research and thesis writing.

MARKETING (MKT)

MKT 600. Marketing Problems. **Three hours.** S.
Prerequisite: Graduating standing.
A survey, analysis and evaluation of current trends, controversial issues and advanced technology in the field of marketing. The course is oriented toward decision making from the standpoint of marketing administration in the firm.

MKT 698-699. Thesis. **Six hours.** I, II, S.
Individual direction of research and this writing.

DEPARTMENT OF BUSINESS EDUCATION AND OFFICE ADMINISTRATION

Alfred Patrick, Chairman; Brannen, Burkett, Hager, Hogg, Jennings, Jones, Moberly, Mountz, Wagner.

The purposes of the Department of Business Education and Office Administration at the undergraduate level are to prepare:

1. Qualified teachers of business certified to teach in secondary schools.
2. Qualified secretaries in two-year or four-year programs.

BUSINESS EDUCATION (BED)

The Department of Business Education and Office Administration, in cooperation with the College of Education, provides programs leading to a Bachelor of Science degree and certificates qualifying graduates to teach business education at the secondary level. Teaching certificates may be in one of three forms. The Department offers an Area in Business Education (which requires a minimum of 48 hours in Business) and single majors (without minor fields of study) for students who plan to teach business subjects exclusively. Graduates with an Area in Business Education are certified to teach in all subject areas of Business Education at the secondary level; students taking single majors (which require from 35 to 39 hours in Business) are not required to have minors and may elect one of three content areas in business teaching in which to concentrate their study. Majors in Business Education which require a minimum of 31 to 34 hours in Business and a minor in some other field are offered for those students who wish to combine teaching Business Education with other subjects. Majors may be completed with emphasis in any one of three fields: accounting, general business, or secretarial.

Students who desire to qualify as teachers for federally reimbursed vocational business education programs follow the same area or major programs outlined above; however, during their sophomore year, they should notify their faculty advisor that this type of certification is desired.

In order to be admitted to the teacher education programs, a student must have a 2.0 grade-point average on his entire record and also in his teaching field or fields. However, to be eligible for student teaching and graduation, a grade-point average of 2.25 is required for the student's entire record and in his teaching field or fields.

Area in Business Teacher Education

Third Year

First Semester	Hours	Second Semester	Hours
ART 390	3	ENG 210 or 212	3
EDF 317	4	Humanities elective, upper division	3
ENG 209 or 211	3	OAD 203	3
OAD 202	3	OAD 301	3
OAD 253	2	SCI or MAT	3
SCI or MAT	3		
	18		15

Fourth Year

First Semester	Hours	Second Semester	Hours
ESH 454	1	ECO 324	3
ESH 455	3	GBU 300	3
EDU 462	4	Business elective, upper division	6
EDU 463	10		
	18		12

Majors in Business Teacher Education—Minors Required

With emphasis in Accounting the following courses are required: ACC–18 hrs.; ECO 230; ESH 455; GBU 300; OAD 151, 152, 253.

With emphasis in General Business the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230, 231, 324; ESH 455; GBU 300; OAD 151, 152, 253; three hours elective in Business.

With the Secretarial emphasis the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230; ESH 454, 455; OAD 115, 116, 151, 152, 202, 253, 254, 301.

Single Majors in Business Teacher Education—No Minors Required

With emphasis in Accounting the following courses are required: ACC–18 hrs.; ECO 230, 231; ESH 455; GBU 300; OAD 151, 152, 253, 301; plus three hours of approved business electives.

With emphasis in General Business the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230, 231, 324, 391; ESH 455; GBU 300; OAD 151, 152, 253, 301; plus six hours from approved business electives.

With the Secretarial emphasis the following courses are required: ACC 108, 109, 3 hrs. ACC elective; ECO 230, 231; ESH 454, 455; OAD 115, 116, 152, 202, 203, 253, 254, 301; plus three hours from approved business electives.

Master of Arts in Education—Business Education

The Department of Business Education and Office Administration offers a graduate program in cooperation with the College of Education and the Graduate School. Students may earn the Master of Arts in Education degree with a specialization in Business Education. The Education Core (9 hours) and BED 570 and 600 must be completed; four of the following Business Education courses must be completed: 550, 560, 610, 620, 630, 640, 650, 660. The remaining hours necessary to complete the 30-hour program will be chosen in consultation with the student's graduate advisor. Courses to correct undergraduate deficiencies in some areas of business may also be required.

DISTRIBUTIVE EDUCATION (DED)

The Department offers an Area in Distributive Education, which requires 49 hours in Business; the Area provides students who want to teach Distributive Education with a broad program in business administration emphasizing marketing and distribution. The Department also offers a single major in Distributive Education, which requires 37 hours in Business.

Area in Distributive Teacher Education

Third Year

First Semester	Hours	Second Semester	Hours
General education SCI or MAT	3	EDF 317	4
MGT 200	3	OAD 301 or 400	3
MKT 300	3	ECO 391	3
GBU 300	3	MKT elective	3
ECO 324	3	Business elective, upper division	3
Business elective, upper division	3		
	18		16

Fourth Year

First Semester	Hours	Second Semester	Hours
DED 460	3	EDU 462	4
DED 470	1	EDU 463	10
EDP	3	ESH 461	3
MKT elective	3		
MGT 410	3		
Business elective, upper division	3		
	16		17

Students will be accepted into this program for graduation as of June, 1972, or later.

Single Major in Distributive Teacher Education—No Minor Required

For the major in Distributive Teacher Education the following courses are required: ACC 108, 109; DED 460, 470; ECO 391; ESH 461; 3 hrs. EDP; GBU 300; MGT 200 or 410; MKT 300 and six hrs. from MKT 304, 310, 320, 450; OAD 301 or 400 and three hours approved business elective.

Students will be accepted into this program for graduation as of June, 1972, or later.

The Department of Business Education and Office Administration sponsors Pi Omega Pi, a national honorary fraternity for outstanding students who are interested in teaching in the field of business. Pi Omega Pi is a member of the Association of College Honor Societies. The aims of Pi Omega Pi are to:

1. Create, encourage, and promote scholarship in Business Education.
2. Aid in civic betterment in colleges and universities.
3. Encourage and foster high ethical standards in business and professional life.

Pi Omega Pi makes an annual award to its outstanding member. The Department also presents annually the National Business Education Association Professional Award to the outstanding senior in business teacher education.

OFFICE ADMINISTRATION (OAD)

As part of its undergraduate program, the Department of Business Education and Office Administration also offers programs for the preparation of secretaries.

Bachelor of Business Administration Degree in Office Administration

The Bachelor of Business Administration degree is offered for students who want to complete a four-year secretarial program without teaching certification. To complete the four-year secretarial program, the following courses in the College of Business are required: the business core (36 hours) and OAD 116, 152, 202, 203, 253, 254, and 560.

All work toward a major in Office Administration must be completed with a grade of "C" or higher.

Two-Year Secretarial Program

The requirements for the two-year secretarial program are shown below:

EXECUTIVE SECRETARIAL PROGRAM

(A two-year program for women students)
Associate of Arts Degree

First Year

First Semester

	Hours
ACC 108, Principles of Accounting	3
GSE 101, English Composition I	3
GSP 180, Fundamental Physical Education Activities	1
GSS 142, Culture and Society	3
OAD 101, Introduction to Business	3
OAD 151, Beginning Typewriting	2
	15

Second Semester

ACC 109, Principles of Accounting	3
GSE 102, English Composition II	3
GSP 181, Fundamental Physical Education Activities	1
OAD 115, Beginning Shorthand	3
OAD 152, Intermediate Typewriting	2
GSS 246, History of Western Civilization	3
	15

Second Year

First Semester

ECO 230, Principles of Economics I	3
GSS 247, History of Western Civilization	3
HEA 202, Safety and First Aid, or GSP 281, Personal and Community Health	2-3
OAD 116, Intermediate Shorthand	3
OAD 253, Advanced Typewriting	2
OAD 254, Office Machines	3
	16-17

Second Semester

ECO 231, Principles of Economics II	3
GSS 248, The Human Problem in the 20th Century	3
OAD 202, Dictation and Transcription	3
OAD 203, Secretarial Practice	3
OAD 301, Business Communications	3
Approved elective	3
	18

This program (a minimum of 64 hours) must be completed with a "C" average or better.

BUSINESS EDUCATION AND OFFICE ADMINISTRATION

Business Education (BED)

BED 550. Workshop in Business Education. **Three hours.** A.

Offered during summer sessions only; enrollment will be limited to business teachers or seniors in business teacher education. A master's degree candidate may not count for graduate credit more than two of these workshops.

BED 560. Cooperative Business Education Programs. **Three hours.** A.

Background, aims, coordination techniques, and administrative policies for organizing and operating cooperative part-time programs in business occupations.

BED 570. Tests and Measurement in Business Education. **Three hours.** I.

Basic qualities of good tests; emphasis placed on construction, analysis, and revision of tests in business education subjects; attention also given to standardized tests and uses of test results.

Distributive Education (DED)

DED 460. Organization and Administration of Vocational Distributive Education. **Three hours.** I.

Prerequisite: Senior in distributive education.

Duties and responsibilities of distributive education teacher-coordinators; facilities, organization, and procedures for establishing distributive education programs.

DED 470. Supervised Work Experience in Distributive Occupations, **One hour.** A.

Prerequisite: Junior or senior in distributive education.

Work experience in distributive occupations; work stations selected and students supervised by University faculty-coordinator.

Office Administration (OAD)

OAD 101. Introduction to Business. **Three hours.** I, II.

Functional areas of business administration; forms of business organization; factors in the location of an enterprise; risk bearing; and control systems used in business. For the student who has no background in business.

OAD 115. Beginning Shorthand. **Three hours.** I, II.

Prerequisite: OAD 151 or its equivalent.

Principles of Gregg shorthand; dictation and transcription. Four hours in class each week.

OAD 116. Intermediate Shorthand. **Three hours.** I, II.

Prerequisites: OAD 115 and 152, or their equivalents.

A continuation of OAD 115 with increased emphasis on dictation and transcription, including the production of mailable business correspondence. Four hours in class each week.

***OAD 151.** Beginning Typewriting. **Two hours.** I, II.

Techniques in keyboard control; skill building practices; knowledge and care of the machine; personal and business letters; use of carbon paper; tabulating; term papers and note books. Four hours in class each week.

OAD 152. Intermediate Typewriting. **Two hours.** I, II.

Prerequisite: OAD 151 or its equivalent.

Continued emphasis on speed and accuracy building; increased emphasis on business papers, manuscripts, reports, and tabulation. Four hours in class each week.

OAD 202. Dictation and Transcription. **Three hours.** I, II.

Prerequisite: OAD 116 and 152.

Continuation of shorthand vocabulary development; improvement of ability to take dictation and transcribe mailable copy; emphasis on development of skill necessary to meet occupational standards.

OAD 203. Secretarial Practice. **Three hours.** I, II.

Prerequisite: OAD 116.

The course is designed to train professional secretaries and to develop skills for secretarial competency and efficiency. The student is given experience in a variety of specialized secretarial duties.

OAD 253. Advanced Typewriting. **Two hours.** I, II.

Prerequisite: OAD 152, or its equivalent.

Increased emphasis upon advanced typewriting problems. Production typewriting is stressed. Five hours in class each two weeks.

OAD 254. Office Machines. **Three hours.** I, II.

Principles and practices of use of various figuring and calculating machines.

OAD 301. Business Communications. **Three hours.** I, II.

Prerequisite: Junior standing.

Principles and practices of modern written business communication; various types of business letters and reports are studied; emphasis is on writing letters and reports.

OAD 400. Business Report Writing. **Three hours.** I, II.

Basic instruction in formal research reports; principles and practices of report writing; planning and outlining the report; methods of securing data; organizing, analyzing, and interpreting data.

OAD 460. Records Management. **Three hours.** A.

Creation classification, retention, protection, and disposal of records; filing procedures and equipment; effects of automation on records management; layout of facilities; records personnel administration; emphasis on administrative control of records.

OAD 560. Office Management. **Three hours.** I, II.

Prerequisites: Senior standing; graduate enrollment on the basis of permission of instructor.

Function and organization of the office; office layout and equipment; office personnel—selection, training, supervision, and compensation; work simplification and control; automation in the office; planning, organizing, and controlling office services; systems and jobs analysis.

OAD 570. Advanced Administrative Office Management. **Three hours.** A.

Prerequisite: OAD 560 or equivalent or experience in office management.

Investigation of problems in such areas as office systems, systems analysis, work simplification, development of performance standards, forms design, mechanization and automation, work measurement, training programs.

*Any student who has received at least one full unit of high school credit in typewriting will not be permitted to take OAD 151 for credit.

GRADUATE COURSES

BED 600. (Formerly 663.) Principles of Business Education. **Two hours.** I.

Objectives, principles, curricula, trends, and major problems of business on the secondary level.

BED 610. Improvement of Instruction in Shorthand and Transcription. **Two hours.** A.

BED 620. Improvement of Instruction in Typewriting and Office Practice. **Two hours.** I.

BED 630. Improvement of Instruction in Basic Business Subjects. **Two hours.** A.

BED 640. Improvement of Instruction in Bookkeeping and Accounting. **Two hours.** II.

BED 650. (Formerly 655.) Administration and Supervision in Business Education. **Two hours.** A.

Problems in layout, equipment, curriculum planning, supervision in business education.

BED 660. (Formerly 664.) Seminar in Business Education. Two hours. II.
Reading and discussion relating to the major current problems in business education.

OAD 600. Business Research and Report Writing. Three hours. II.
Prerequisite: Economics 391 or equivalent.
Nature, scope, and importance of business research; research methodology; principles and mechanics of formal report writing; collection of data and completion of a formal report by each class member. Enrollment is limited to students in the Master of Business Administration Degree program.

DEPARTMENT OF ECONOMICS (ECO)

Donald Shadoan, Chairman; Chrisman, Brizendine, Engle, Hilton, Kemp, Morrow, Sharp.

The curriculum in Economics is designed to increase the student's understanding of economic principles and to prepare the student for employment in the field of business and economics with privately owned firms and governmental agencies. Also, the program is designed to give the student an adequate background for graduate study.

A major in Economics may be taken by both the student working toward a degree in the College of Business and by the student pursuing a degree in the College of Arts and Sciences. A minor in Economics (non-teaching) is available only for the student pursuing a degree other than in the College of Business. A minor in Economics (teaching) is available to all students pursuing a teaching major.

A student enrolled in the College of Business, majoring in Economics, will take the business core courses and 18 additional hours in Economics which must include the following courses: ECO 597, 593, 550. A student enrolled in the College of Arts and Sciences, majoring in Economics, is required to take 30 hours in Economics which must include the following courses: ECO 230, 231, 324, 593, 597, 550.

A student taking work toward a minor in Economics (non-teaching) is required to take 18 hours in Economics including the following courses: ECO 230, 231, 324, 593, 550.

Students minoring in Economics (teaching) must take a minimum of 18 hours in Economics. Students with majors which require Economics must take at least 18 hours of economics in addition to the Principles of Economics course or courses (ECO 230, 231) required for that major. The following courses are required: ECO 230, 231 and 324. The remaining hours may be selected from the following courses: ECO 260, 333, 432, 492, 550, 597 and 593. Other additional upper division courses may be approved by advisor.

College of Business students must make a grade of "C" or higher in all courses counting toward the major in Economics.

The Department of Economics, in cooperation with the Graduate School and the College of Business, participates in the Master of Business Administration program. A student enrolled in this program may take a concentration in Economics consisting of 12 hours of graduate level Economics courses. In addition, the student is required to take ECO 604. All Economics courses counting toward a concentration in Economics must be selected in consultation with the student's advisor. A detailed description of this program is presented in the *Graduate Catalog*.

ECONOMICS (ECO)

ECO 110. American Economic History. **Three hours.** A.

This is a general course in American Economic History, which stresses a historical description of trends and events from the European back ground of Colonial America to the present time. Special emphasis is placed upon modern interpretation regarding economic growth and upon governmental action in the field of economics.

This course will not count toward a major in business or economics.

ECO 111. European Economic History. **Three hours.** A.

A general survey of the economic conditions and activities of Europe from the Middle Ages to the present. Among the topics which will be treated are: the rise and breakdown of feudalism, the industrial revolution, the development of agriculture, industry, finance, and transportation.

This course will not count toward a major in business or economics.

ECO 230. Principles of Economics I. **Three hours.** I, II.

A course in microeconomics: A survey and study of the basic economic principles and their application to the firm operating in a modern economy. A study of the concepts of demand, supply, pricing, and resource allocation under various competitive conditions, marginal analysis, government and business, and income distribution.

ECO 231. Principles of Economics II. **Three hours.** I, II.

Prerequisite: ECO 230.

A macroeconomics course: A survey and study of the economic principles as they apply to the American economy. A study of national income, production, employment, the money and banking system, the modern theory of national income, economic growth, inflation and deflation, and the problems of economic stabilization.

ECO 260. Consumer Economics. **Three hours.** A.

The role of consumers in economic life, consumers choice; who guides consumers; freedom of choice; custom-made wants; the profitable practice of fraud; price appeal; making it easy to buy; consumer education; planning expenditures; intelligent buying; cooperative buying; buying protection; buying shelter; buying investments; producer aids to consumers; standards of consumers; governmental aids to consumers.

May not be included toward a BBA degree.

ECO 324. Money and Banking. **Three hours.** I, II.

Prerequisite: ECO 231.

Nature and functions of money; kinds of money; monetary systems; history of banking; functions of the commercial bank; the national banking system; deposits and depositors; bank assets and reserves; loans and discounts; bank supervision; the federal reserve system; central banking policies and practices; monetary and fiscal policies both nationally and internationally.

ECO 333. Economics of Labor. **Three hours.** II.

Prerequisite: ECO 231.

This is a course in the economics of labor relations. Emphasis is placed upon the history of the labor movement, union structure and government, collective bargaining, the economics of the labor market, and governmental regulation and control of labor. Special attention is paid to current problems and issues in the field of labor relations.

ECO 391. Statistical Methods. **Three hours.** I, II.

Prerequisite: Junior standing.

The course will consider such as the following: frequency distributions; measures of location; measures of variation; probability; theoretical distributions; sampling distribution; problems of estimation; tests of hypotheses; problems of sampling; linear regression; correlation; index numbers; time series analysis.

ECO 394. International Economics. **Three hours.** I.

Prerequisite: ECO 324.

An introduction to international trade theory, balance of payments, commercial policies and selected international financial institutions. Surveying the problems of the international economy includes: (1) the challenge of the European Common Market; (2) international monetary reform; (3) disruptive effects of the Cold War; and (4) the special problem of the underdeveloped countries. The role of the U. S. is emphasized throughout.

ECO 432. Alternative Economic Systems. **Three hours. I.**
Prerequisite: ECO 231.

A somewhat detailed treatment of such topics as the following: capitalism; utopian forerunners; the Marxian theory of socialism and communism; modern socialism and communism; British socialism; the ecoomy of the Soviet Union; Fascism as existed in Italy and Germany; the Consumers' Cooperative Movement.

ECO 492. Business Cycles. **Three hours. II.**
Prerequisite: ECO 231.

This course will deal with the following topics: growth, instability, inflation, and change; long-run growth; short-run fluctuations; personal spending and saving decisions; saving and spending in the business sector; government expenditure and tax patterns; the total flow of spending; prices, output, and employment; historical cyclical patterns; business cycle theories; and economic forecasting.

ECO 495. The Economics of Growth and Development. **Three hours. II.**
Prerequisite: ECO 231.

The measurement of underdevelopment; the international distribution of income; the causes of economic growth; public policy for the promotion of economic growth; theories and development.

ECO 510. History of Economic Thought. **Three hours. I.**
Prerequisite: ECO 231.

A study of the history of economic ideas from the ancient period to the end of the classical period. Stress is placed on the need for a critical analysis of the meaning, validity, and relevance of economic theories with respect to the social and economic environment of the theorists.

ECO 511. History of Economic Thought Since the Austrian School. **Three hours. II.**
Prerequisite: ECO 231.

A critical study of economic thought since 1870; forerunners of neoclassical economics; neoclassical thought; American Institutionalists; the Historicists; economic aggregates and econometrics; theories of business activities from Misselden to the depression of the 1930's; Keynesian and post Keynesian theories; association and planning.

ECO 550. National Income Analysis. **Three hours. I.**
Prerequisite: ECO 231.

A study of the fundamentals of macroeconomic analysis: the classical background; Keynes' objections to classical theory; basic national income concepts; consumption demand and the consumption functions; investment and income determination; interest and money; money wages and prices; employment theory; the development of Keynesian thought and the social philosophy toward which it leads.

ECO 593. (Formerly ECO 493.) Intermediate Economic Theory and Analysis. **Three hours. I, II.**
Prerequisite: ECO 231.

A development of the leading theories and analyses of value and distribution. Problems and policies of price determination of both the firm and the industry and factor pricing are considered at the intermediate level of analysis.

ECO 597. (Formerly ECO 497.) Private Enterprise and Public Policy. **Three hours. I.**
Prerequisite: ECO 231.

A study of the principal statutes pertaining to business behavior and their application by agencies and the courts. Specific policies are analyzed from the standpoint of legal and economic concepts and principles underlying them.

GRADUATE COURSES

ECO 600. Managerial Economics. **Three hours. II.**
Prerequisite: ECO 231 or equivalent.

This course deals with the phases of micro and macro economics that are directly relevant to managerial decision-making. The concepts to be considered are: demand, costs, profits, competition, pricing, national income analysis, and economic stabilization. A considerable amount of emphasis will be placed upon the imperfect market conditions facing the decision-maker.

ECO 604. Statistical Methods. **Three hours. I .**

Prerequisite: ECO 391 or equivalent.

An intermediate course in statistical methods that deals with the following topics: sampling theory, elementary probability theory, multiple and linear correlation analysis, hypothesis testing, chi-square distribution, analysis of variance, economic forecasting, and non-parametric statistics.

ECO 620. Contemporary Economic Problems. **Three hours. A.**

Prerequisite: ECO 231 and approval of instructor.

This course deals with the application of economic principles to certain contemporary economic problems such as economic growth, economic stability, taxation, employment, poverty, national debt, gold outflow, monetary and fiscal problems.

ECO 698-699. Thesis. **Six hours.**

Individual direction of research and thesis writing.

EKU

College of Education

Educational Administration . 299
Educational Foundations . 301
Educational Psychology and Guidance . 303
Elementary Education . 306
Laboratory School . 310
Library Science . 310
Secondary and Higher Education . 313
Special Education and Rehabilitation . 317
School of Health, Physical Education, Recreation and Athletics . 321
Physical Education for Men . 322
Physical Education for Women . 324
Recreation and Park Administration . 329
School and Public Health . 332

COLLEGE OF EDUCATION

Dixon A. Barr, Dean

Charles H. Gibson, Associate Dean

Eastern Kentucky University has maintained a strong interest in and commitment to the preparation of teachers since its founding in 1906. While teacher education at Eastern is viewed as an all-university function, the College of Education assumes major responsibility for students majoring in elementary education, library science, physical education, public health, recreation, rehabilitation education, school health, and speech pathology and audiology. Freshman and sophomore students in these academic areas are advised in cooperation with Central University College; upper classmen entering these programs will be assigned an advisor by their department chairman upon admission to the College of Education.

Admission to the College of Education

Admission to the College of Education is based on the following requirements:

1. Completion of a minimum of 64 semester hours of prescribed coursework in the appropriate program in Central University College.
2. Attainment of a cumulative grade point average of 1.8 (on a 4.0 scale) or higher.

Admission to Teacher Education

Those students planning to follow a teaching program in the College of Education must meet the requirements for admission to the Teacher Education program. It must be clearly understood that admission to the College of Education is not synonymous with admission to the Teacher Education program. The specific requirements for admission to the Teacher Education program are found in the General Academic Information section of this catalog.

Graduation Requirements

Students completing programs in the College of Education are eligible for the Bachelor of Science degree, except library science majors who are eligible to receive the Bachelor of Arts degree upon satisfactory completion of program requirements. General graduation requirements from the Collge of Education are as follows:

1. Completion of a minimum of 128 semester hours, 43 of which must be in upper division courses (300, 400 and 500 levels). Thirty of the last 36 hours must be earned in residence at Eastern Kentucky University. Not more than twenty-five per cent of the total credits offered for a degree may be in correspondence and/or extension work. Credits earned by correspondence may be accepted only if approved by the student's major professor and the Dean of the College of Education.

2. Completion of all coursework on the student's Planned Curriculum.
3. Attainment of a minimum cumulative grade point average of 2.0 or higher. (Students in teaching curricula are reminded that a 2.25 in overall coursework, in academic major/minors, and a grade of "C" or above in EDF 202/300 and 317 is required for admission to student teaching.)

Secondary education majors (other than those in library science, physical education, school health, and speech pathology and audiology) will follow the prescribed curriculum and requirements of another academic college, as well as the policies for Teacher Education stated elsewhere in this catalog. These students take certain professional education coursework in the College of Education, as well as in their academic college. The College of Education cooperates closely with the other colleges in matters pertaining to the secondary major's admission to Teacher Education, as well as approval for, assignment to, and supervision of student teaching. The Dean of the College of Education and the appropriate academic dean jointly approve the graduation application for secondary education majors.

Graduate Programs

The College of Education in cooperation with the Graduate School has developed and implemented Master of Arts in Education degree programs for elementary school teachers, guidance counselors, school librarians, special educators, and secondary school teachers of health and physical education. Other graduate programs include a fifth year program for certificate renewal, a sixth year program leading to Rank I certification, the Master of Arts degree in guidance and counseling for non-school personnel, the Specialist in Education degree in educational administration and supervision, elementary education, physical education, school counseling and guidance, student personnel services in higher education, and a joint doctoral program in education (Ed.D. and Ph.D.) with the University of Kentucky. Work leading toward ultimate certification in school administration and/or supervision may be elected, subject to institutional approval, while pursuing the master's degree in a teaching field. Graduate programs leading to the Master of Arts in Education degree have been developed in many secondary teaching fields in cooperation with the College of Applied Arts and Technology, the College of Arts and Sciences, and the College of Business. Specific information regarding these graduate programs is found elsewhere in this publication and in the separate *Graduate Catalog.*

EDUCATIONAL ADMINISTRATION (EAD)

Henry G. Martin, Chairman; Marcum, Ross, Rush, Stewart.

The Department of Educational Administration offers a graduate program of specialization for those students who plan to become school superintendents, principals, and supervisors. The provisional and standard certificate requirements are included for those majoring in educational administration. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs:

Rank I certification (Sixth Year Non-degree Program)
Certification in 15-semester hour programs
Specialist in Education Degree
Educational Administration and Supervision

For additional information regarding these programs, contact the office of the department chairman or consult the *Graduate Catalog.*

GRADUATE COURSES

EAD 507. (Formerly EDU 507.) Problems in Educational Administration. **One to three hours.** A.

Prerequisite: Approval of advisor and the chairman of the department.

Independent work, special workshop, special topic, or seminar.

EAD 600. (Formerly EDU 600.) Introduction to Educational Administration. **Three hours.** I, II.

Study of theories of administration and practice of these theories at the system level and community level. Studies of administrative functions of school personnel are examined. Research in the administration field by CPEA makes up a large part of the materials for the course.

EAD 601. (Formerly EDU 601.) School Personnel Administration. **Two hours.** A.

To acquaint school administrators with problems that arise in the management of school personnel.

EAD 602. (Formerly EDU 602.) School Buildings and Grounds. **Two hours.** A.

Emphasis on the cooperative planning of school buildings that will fit the school program as identified by educational specifications. Equipping, furnishing and maintaining the buildings are studied.

EAD 603. (Formerly EDU 603.) School Finance. **Two hours.** A.

Study of the financing of the public schools. Stress is given to the importance of the administrator's understanding of the problems and issues of school finance at the local, state, and federal levels in order that he may provide leadership that will pave the way for adequate support.

EAD 605. (Formerly EDU 605.) Kentucky School Law. **Two hours.** A.

Principles of school law, constitutional provisions relating to public schools in Kentucky, school districts, buildings, and other school property, school officers, the State Department of Education, school support, conduct of schools, compulsory attendance, school faculties and other employees, retirement, tenure, vocational education, rehabilitation education, higher education and court interpretation of the laws.

EAD 606. (Formerly EDU 606.) The Elementary School Principal. **Three hours.** II.

Prerequisite: EAD 600.

Organization and management of the elementary school. Study of the various duties, demands, and responsibilities of the elementary school principal in providing professional and educational leadership.

EAD 607. (Formerly EDU 607.) The Secondary School Principal. **Three hours.** II.

Prerequisite: EAD 600.

Organization and management of the secondary school. Study of the various duties, demands, and responsibilities of the secondary school principal in providing professional and educational leadership.

EAD 611. (Formerly EDU 611.) Supervision of Instruction. **Three hours.** I.

Objectives and problems of school supervision: techniques and functions of supervision; current practices in supervision; problems of organizing instruction to meet increasing responsibilities of public schools; analyzing teachers' difficulties; planning supervisory programs; selecting and organizing instructional materials, techniques for developing desirable professional relations; problems of in-service education for teachers.

EAD 691. Issues and Trends in Educational Administration & Supervision. **Three hours.** A.

Exploration of basic issues and trends in the fields of educational administration and supervision. Development and critical analysis of substantive positions on issues and of movements implementing those positions. Designed for graduate students in the Specialist in Education degree programs in educational administration and supervision. (Should be taken during the student's first nine hours in the Ed.S program.)

EAD 697. Independent Study. **One to three hours.** A.

Designed for advanced graduate students who desire to investigate special problems relating to educational administration and/or supervision.

EAD 698. Research Design in Educational Administration and Supervision. **Two hours.** A.

Study of research and investigation in the areas of educational administration and supervision; identification of significant findings and areas of needed study. Includes emphasis on selecting and designing a study leading to the Specialist Project.

EAD 699. Specialist Project. **Four hours.** A.

Prerequisite: Limited to candidates for the Ed.S. degree.

Designed to guide the Ed.S. candidate in the development of a scholarly project in educational administration or supervision. The project may be one of several types: a field project, a creative study, or more formal types of research and inquiry.

EDUCATIONAL FOUNDATIONS (EDF)

William A. McKenney, Jr., Chairman; Brewer, Collins, Flesher, R. Grise, Henry, Hume, D. Mills, Stull, Woolum.

The Department of Educational Foundations provides instruction in those professional subjects deemed basic to the teacher education student's preparation regardless of his teaching specialty or intended level of school practice. The department offers instruction in a number of related foundational disciplines including human development, educational sociology, educational philosophy, history of education and comparative education.

Graduate instruction in the foundations is provided as a service to all degree programs in Education. Foundations courses contribute to that core of common learnings required of all master's degree programs in Education and in other related fields.

EDF 202. Professional Orientation. **Three hours.** I, II.

Prerequisite: Sophomore standing.

Designed to acquaint the students with the role of public education and the nature of the teaching profession. He will be guided in analyzing his personal fitness for teaching and in choosing a field. Application is made for admission to the Teacher Education Program.

EDF 300. Issues and Trends in American Education. **Three hours.** I, II.

Required of junior level transfer students. Focus is on current issues and trends in American education, and their implications for teachers and school programs. Students make application for admission to the Teacher Education Program and assessments are made of their potentials for a career in teaching. Not open to students who have taken EDF 202 at Eastern Kentucky University.

EDF 317. Human Development. **Four hours.** I, II.

Prerequisite: PSY 211, Biological or Physical Science, admission to the Teacher Education Program.

Study of physiological, affectional, peer, cultural, and self process which influence development and learning at all stages from conception to adulthood. Emphasis upon principles of development and learning for children and adolescents with related implications for teacher behavior. Provides laboratory experience of studying one child through time to reveal the impact of these forces upon both groups and individuals.

EDF 507. Problems in Educational Foundations. **One to three hours.** A.

Prerequisite: Approval of advisor and the chairman of the department.

For independent work, special workshops, a special topic, or seminar.

EDF 516. Child Development Laboratory I. **Three hours.** A.

Each participant selects a child for study, writes a description of the child and gathers significant data about the child from all available sources of information. Emphasis is placed upon skills in observation, objectivity in recording, and realism in analysis of causes of behavior. The course, for in-service teachers, continues for the entire school year, and each participant must complete his analysis in a structured summary.

EDF 517. Child Development Laboratory II. **Three hours.** A.

Continuation of EDF 516, but with added emphasis on procedures for analysis of the dynamics of behavior. A structured framework of six broad areas of factors and processes in child development is employed. The record must be summarized in terms of developmental tasks within these areas.

EDF 518. Child Development Laboratory III. **Three hours.** A.

A continuation of EDF 517.

EDF 526. Applying Research to Classroom Problems. **Two hours.** I.

Study and interpretation of recent research for the help it can give in dealing with classroom situations and problems. Class members will be encouraged to focus on situations and problems directly related to their own teaching.

GRADUATE COURSES

EDF 615. Human Development. **Three hours.** I, II.

Study of the forces which influence personality development and learning, implications for classroom procedures, and the role of the teacher in using these forces to promote optimum development and learning. Each student is expected to choose and conduct intensive research on some problem of interest in the area of human behavior.

EDF 632. History of Education in the United States. **Two hours.** I, II.

Rise and development of public education in the United States with special emphasis upon the work of Horace Mann; sociological, psychological, and scientific movements in education; desirable education reorganization; the influence of John Dewey; brief study of the development of public education in Kentucky.

EDF 636. Philosophy of Education. **Two hours.** I, II.

Meaning and scope of philosophy and education; contrasting philosophies and conceptions of education; the nature and meaning of education in relation to the individual and the social order; education and democracy; social progress and social control; the nature of thinking; educational aims and values; subject matter and methodology in relation to the educative process; character education; evaluation and interpretation of present-day issues and problems in education.

EDF 637. (Formerly EDF 537.) Comparative Education. **Three hours.** I.

Study of the development of educational thought and practice in selected nations of Europe, the Orient, and South America. Emphasis will be placed on intellectual, historical and sociological factors responsible for similarities and differences among the selected systems. Special emphasis will be given to a comparison of American and Communist educational techniques.

EDF 638. Modern Trends in Educational Philosophy. **Two hours.** A.

Prerequisite: EDF 636 or its equivalent.

Study of alternative philosophies and their implications for current educational theory and practice.

EDF 650. Educational Sociology. **Three hours.** I, II.

Relation of sociology to education; sociological problems and their educational implications; social groups and institutions in relation to education; social forces and their significance in society; the sociological determination of educational objectives; social elements and values in the curriculum; democracy in school administration and supervision; essential elements of a socialized educational program.

EDF 669. Research in Education. **Two hours.** I, II.

Fundamental principles of educational research; types of research and the technique of each type; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.

Required of all candidates for the Master of Arts in Education degree who do not prepare a thesis. This course should be taken as early as possible in the graduate program.

EDF 670. Thesis. **One to three hours.** A.

Designed for students who are preparing a thesis in partial fullfillment of the requirements for the degree of Master of Arts in Education. If the thesis requirement is waived, EDF 669, Research in Education, is required.

EDF 681. Leadership in Child Study. **Two hours.** A.

Prerequisite: Master's degree or permission of chairman of the department.

Designed for those who expect to assume leadership roles in helping teachers understand the behavior of pupils. Both extensive and intensive attention is given to methods of observation, the keeping of anecdotal records, selection of data, home visitation and interpretation.

EDF 683. Analysis of Recent Research in Human Development. **Three hours.** A.

Prerequisite: EDF 615.

Designed for graduate students who are interested in current efforts to learn more about the behavior of children, and to find ways of utilizing this knowledge in the educative process. Experiences consist of individual and group research into current and recent exploration and study of factors and processes which affect the development and learning of children. Evaluation of this research is through critical group discussion in seminar like atmosphere.

EDF 695. Advanced Research Methodology. **Three hours.** A.

Prerequisite: EDF 669 or its equivalent.

Theories and models of various research designs in the study of human behavior and the educative process. Appropriate statistical analyses of population and data. Individual proposals may be developed.

Required of all students in Specialist in Education degree programs.

EDUCATIONAL PSYCHOLOGY AND GUIDANCE (EPY & EPG)

Robert Hayes, Chairman; Doane, Gupta, Snowden, Southwood.

The Department of Educational Psychology and Guidance offers graduate programs of specialization for those students who plan to become school counselors, non-school counselors, and student personnel workers in higher education. A program with emphasis in school social work is offered in cooperation with the Department of Anthropology and Sociology. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs:

- Master of Arts in Education Degree
  - School Guidance and Counseling (Elem. and Sec.)
  - School Social Work
- Master of Arts Degree
  - Non-School Guidance and Counseling
  - Student Personnel Services in Higher Education
- Rank I Certification (Sixth Year Non-degree Program)
- Specialist in Education Degree
  - School Guidance and Counseling
  - Student Personnel Services in Higher Education

For additional information regarding these programs, contact the office of the department chairman or consult the *Graduate Catalog.*

EDUCATIONAL PSYCHOLOGY (EPY)

EPY 320. (Formerly PSY 320.) Educational Psychology. **Three hours.** II.

Prerequisite: PSY 211.

Theories and processes of learning, maturation, individual differences, personality, and statistical procedures.

EPY 507. Problems in Educational Psychology and Guidance. A.

Prerequisite: Approval of the advisor and chairman of the Department of Educational Psychology and Guidance.

Independent work, special workshops, seminar, or a special topic.

EPY 521. Measuring and Evaluating Pupil Progress. **Three hours.** A.

Study of modern concepts of evaluation. Emphasis on assumptions, approaches, and procedures used in measuring, evaluating, and reporting pupil progress.

EPY 523. Guiding Classroom Learning. **Three hours.** II.

Understanding and applying principles of learning in a classroom setting. Study of ways in which a teacher can develop his instructional program insuring an optimal learning environment.

GRADUATE COURSES

EPY 616. (Formerly EPG 616.) Educational Measurement. **Three hours.** I, II.

Investigation of standardized and teacher made tests and other measuring devices. Emphasizes application and interpretation of statistical methods of evaluation and research in education.

EPY 624. Individual Appraisal of Intelligence. **Three hours.** A.

Prerequisite: EPY 616 and/or EPY 642.

Administration and interpretation of individual intelligence tests from preschool through adult levels. Observations and demonstrations, field testing experiences, test interpretations, and report writing.

EPY 642. Applied Statistical Methods. **Three hours.** I, II.

Measurement in psychology and education; frequency distribution; measures of central tendency; variability; application of the normal distribution curve; prediction; correlation methods; reliability and validity of tests.

EPY 652. Advanced Educational Psychology. **Three hours.** A.

Prerequisite: Consent of instructor.

Applied science approach to developing spirit of inquiry, importance of empirical methods, understanding and appreciation of scientific methods, and testing subjective theories and hypotheses.

EPY 654. Mental Health and Personal Adjustment. **Three hours.** A.

Prerequisite: Consent of instructor.

Emphasis on positive aspects of mental health and adjustment and personal understanding of the affective and cognitive factors affecting personality development and inter-personal relations.

EPY 698. Research Design in Counseling. **Two hours.** A.

A comprehensive experience in research design in counseling and the helping relationship. Attention will also be given to methodology, measurement, observations, and data collection and analysis.

EPY 699. Specialist Project. **Four hours.** A.

Prerequisite: EPY 642 and approval of the chairman of the department.

For graduate students who are engaged in specifically approved research projects in the field of counseling and/or student personnel services, under the personal direction of a professor approved by the chairman of the department.

GUIDANCE (EPG)

EPG 515. (Formerly EDU 515.) The Role of the Teacher in Guidance. **Three hours.** A.

Designed to aid the prospective teacher in examining the concepts, principles, and foundations of guidance as these apply to effective teaching.

GRADUATE COURSES

EPG 602. (Formerly PSY 602.) Counseling Psychology. **Three hours.** I.

Prerequisite: PSY 211.

Survey of counseling methods and concepts. Consideration of research findings and problems.

EPG 608. Administration of Pupil Personnel Services. **Three hours.** A.

Designed to prepare pupil personnel workers for service in an educational setting.

EPG 613. Introduction to Pupil Personnel Services and Guidance. **Three hours.** I, II.

Survey of philosophy and fundamentals of pupil personnel services, with emphasis on the nature of the helping relationship. Emphasis is on history, philosophy, characteristics, and practices common to counseling services.

EPG 614. Organization and Administration of Guidance Services **Three hours.** A.

Prerequisite: EDG 613 or consent of instructor.

A study of the administrative procedures and policies needed in establishing guidance services.

EPG 620. Group Counseling. **Three hours.** I, II.

Prerequisite: EPG 613 and/or consent of instructor.

Focus on understanding the dynamics of group interaction and the role of the counselors in assisting individuals in achieving self-direction.

EPG 622. Occupational and Educational Information. I, II.

Designed for counselors, industrial and social agency supervisors and teachers to give orientation to and experience with occupational, educational, and social information.

EPG 625. Elementary School Guidance. **Three hours.** A.

Understanding of counseling methods with elementary school children, including an awareness of working with teacher, administration, pupil personnel workers, and parents, in making the school a secure environment for the student.

EPG 630. Counseling Practicum in the Secondary Schools. **Three hours.** I, II.

Practicum student will be assigned, under supervision, to counseling experiences with secondary school students in a secondary school setting.

EPG 632. Counseling Practicum in the Elementary Schools. **Three hours.** I, II.

Prerequisite: EPG 625.

Practicum student will be assigned, under supervision, to counseling experiences with elementary school students in an elementary school setting.

EPG 634. Counseling Practicum in Higher Education. **Three hours.** A.

Prerequisite: EPG 644.

Practicum student will assist with testing programs, record keeping, and counseling college students, may also be assigned as dormitory or resident counselors or as Student Affairs and Activities Counselor.

EPG 636. Counseling Practicum in Community Settings. **Three hours.** I, II.

Prerequisite: EPG 640.

Practicum student will be assigned, under supervision, to counseling experiences in a community center, public agency, social welfare center, or other institutional setting.

EPG 640. Counseling Theory and Practice. **Three hours.** A.

Supervised experiences in major theoretical and philosophical counseling orientations with individual and group examinations of personal values from actual counseling experiences.

EPG 644. Student Personnel Services in Higher Education. **Three hours.** I.

Principles of student personnel services, role functions, and problem areas in student personnel. Emphasis upon communications, legal problems, community college needs, and structural organization.

EPG 645. Internship in Student Personnel Services. **Three hours.** II.

Supervised experience for student personnel trainees. Opportunities provided to share responsibilities for all phases of the school guidance program. Jointly supervised by counselor education staff and student personnel staff.

EPG 646. Innovations in Counseling Techniques. **Three hours.** A.

Exercises assumptions of major counseling techniques as they refer to nature of reality, truth, and human values in a dynamic changing scene. Emphasizes effective and meaningful change through counseling.

EPG 647. Advanced Counseling Practicum in Elementary Schools. **Three hours.** A.
Prerequisite: EPG 632.

Supervised practice in counseling with emphasis upon evaluation of counseling interviews with elementary school students.

EPG 648. Internship: Counseling. **Three hours.** A.

On-the-job supervised experience for counselors. Joint supervision by local school directors of guidance and the counselor education staff. Opportunities provided to share responsibilities for all phases of the school counseling program.

EPG 649. Advanced Counseling Practicum in Secondary Schools. **Three hours.** I, II.

Prerequisite: EPG 630.

Supervised practice in counseling with emphasis upon evaluation of counseling with secondary school students.

EPG 651. Advanced Counseling Practicum in Higher Education. **Three hours.** A.
Prerequisite: EPG 634.

Supervised practice in counseling with emphasis upon evaluation of counseling with students in higher education.

EPG 691. Issues and Trends in Counseling. **Three hours.** A.

The challenging changes, current issues, and developing trends and consequent questions, problems, controversies, and directions in counseling emphasized and critically examined.

ELEMENTARY EDUCATION (ELE)

William A. Morris, Chairman; Barker, Byrne, Chisholm, R. Deane, Dettre, A. Francis, E. Francis, Gatwood, Hendricks, J. Howard, E. Jeffries, M. Jennings, R. Miller, Peel, Ramsey, Sams, Simmons, A. Stark, Survant, M. Thompson, Waldrop.

The Department of Elementary Education has advisory and curricular responsibility for students majoring in elementary education and offers elective courses for other interested students. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs.

- Master of Arts in Education Degree
    - Elementary Education
    - Elementary Education-Reading
- Rank II certification (Fifth Year Non-degree Program)
- Rank I certification (Sixth Year Non-degree Program)
- Specialist in Education Degree
    - Elementary Education

For additional information regarding these programs, contact the office of the department chairman or consult the *Graduate Catalog.*

Curriculum for a major in Elementary Education. (Teaching.)

The first two years of the curriculum may be found in the Central University College section of this catalog.

Third Year

First Semester	Hours	Second Semester	Hours
ART 360	3	ELE 361	3
EDF 317	4	HIS 202 or 203	3
ENG 350 or 351	3	LIB 301	3
MAT 202 or 204	3	ELE 362	3
MUS 360	3	PHE 322	2
		Geography or Hum., or elective	3
	16		17

Fourth Year

ELE 354	3	ELE 498	6
ELE 360	3	ELE 499	10
ELE 475	3		
Hum. or Social Sci. elective	6		
	15		16

Elementary education majors have available to them dual certification options in kindergarten education, special education, and library science. For curriculum information regarding special education and library science consult the appropriate section of this catalog.

KINDERGARTEN EDUCATION CURRICULUM

Endorsement for teaching in kindergarten is available to interested persons who are majoring in elementary education. Completion of the following ten hours—in addition to the regular program for elementary education—is required:

ELE 517	The Child in Early Education	3
ELE 519	Teaching in the Kindergarten	3
ELE 520	Practicum in Kindergarten Education	4
TOTAL		10

ELEMENTARY EDUCATION (ELE)

ELE 011. Rapid Reading and Study Skills (Non-credit). I, II.

Designed for improvement in vocabulary development, comprehension and critical reading skills, course includes: how to study effectively (SQR-4 technique), how to budget time, how to listen and take notes, how to build vocabulary, how to prepare for and take examinations, how to become a flexible reader, and how to improve concentration.

ELE 354. Reading in the Elementary School. **Three hours.** I, II.

Prerequisite: EDF 317, admission to Teacher Education Program.

Methods and materials for teaching reading in the elementary school.

ELE 356. Social Studies in the Elementary School. **Three hours.** I, II.

Designed for prospective and in-service elementary school teachers. Attention given to methods and materials in social studies.

ELE 358. Language Arts in the Elementary School. **Three hours.** I, II.

The role of the language arts in the elementary school curriculum. Content will focus upon listening, speaking, spelling, handwriting, and written expression. Attention is not given to the teaching of reading.

ELE 360. Teaching of Elementary School Mathematics. **Three hours.** I, II.

Prerequisites: EDF 317, MAT 201 and 202 or MAT 203 and 204, and admission to Teacher Education Program.

Methods and materials of teaching elementary mathematics; emphasis on discovering and developing fundamental concepts as a foundation for problem-solving; use of modern instructional media in planning and demonstrating lesson plans. Opportunities to observe classes on primary and intermediate levels.

ELE 361. Art Education in the Elementary School. **Three hours.** I, II.

An inquiry into art education as an integral part of the total school experience. Implications for fostering creative growth and development within the child. Not open to art majors or minors.

ELE 362. Music Education for the Elementary Teacher. **Three hours.** I, II.

Prerequisite: MUS 360.

Study and appraisal of teaching techniques, music literature, learning activities, curricular plans, and materials essential to the sequential development of musical learning in the elementary school.

ELE 475. Science for Elementary Teachers. **Three hours.** I, II.

Prerequisite: 12 hours in general studies science.

Modern materials and methods for elementary science teaching from kindergarten through grade eight. Five discussion-laboratory hours per week.

ELE 498. (Formerly EDU 460.) Fundamentals of Elementary Education. **Six hours.** I, II.

Prerequisite: EDF 202 or 300, 317, ELE 354, 360, and 475. (SEE SUPERVISED STUDENT TEACHING IN CATALOG.) Taken for the first six weeks of the same semester as ELE 499.

Functional and graduated approach to responsible teaching in the elementary school through study and discussion, directed observation and laboratory experiences involving preparation of teaching materials, and other experiences prior to student teaching.

ELE 499. (Formerly EDU 463.) Supervised Student Teaching. **Five to Ten hours.** I, II

Prerequisite: ELE 498 (SEE ADMISSION TO STUDENT TEACHING IN CATALOG.)

Observation, participation and responsible classroom teaching along with related professional activities.

ELE 499s. (Formerly EDU 463b.) Laboratory Experiences in Elementary Education. **Eight hours.** (Offered only in Summer Session.)

Prerequisite: ELE 498.

Designed to meet needs of experienced teachers who have taught on full-time basis for a period of three years on legal certificate and who are qualified under regulations of the State Board of Education to use this course as substitute for any part or all of Student Teaching.

ELE 501. Geography in Education. **Three hours.** I, II.

Prerequisite: Twelve hours of Social Science or six hours of geography.

Geography in present day school systems from elementary school to university. Special emphasis directed toward course objectives, outlines, problems, evaluation of departments, geographic literature and equipment, and other materials.

ELE 507. Problems in Elementary Education. **One to Three hours.** A.

Prerequisite: Approval of advisor and the chairman of the department.

For independent work, special workshops, special topic, or seminar.

ELE 517. (Formerly ELE 527.) The Child in Early Education. **Three hours.** I, II.

Focuses specifically on physical, social, psychological, and intellectual development of the child under six and role of the kindergarten teacher in working with young children.

ELE 519. Teaching in the Kindergarten. **Three hours.** I, II.

Prerequisite: ELE 517.

Content fucuses upon the kindergarten movement; organization, equipment, curriculum, and procedures used with children of kindergarten age; leaders and literature of kindergarten education. Opportunity provided for observing and participating in kindergarten.

ELE 520. (Formerly ELE 528) Practicum in Kindergarten Education. **Four to eight hours.** I, II.

Prerequisite: ELE 519.

Observation and teaching under professional supervision.

ELE 522. (Formerly ELE 520.) Creative Experiences in Childhood Education. **Three hours.** A.

Designed for prospective and in-service teachers with focus upon the nature of creativity, development of skills used in creative expression; activities which promote creativeness in children and teachers.

ELE 541. Survey of Elementary Curricular Programs. **Three hours.** I, II.

Designed for students in physical education, art, or music seeking certification for grades 1-12. Explores elementary curriculum as it meets the need of the child for which the school is responsible. Interrelationship of role of special teachers, problems of individual learners, and function of the entire school-community are examined. Not open to elementary education majors.

GRADUATE COURSES

ELE 610. Elementary School Curriculum. **Three hours.** I, II.

Study in depth of principles, practices, materials, and procedures in current curriculum development and revision in the elementary school.

ELE 663. Improving the Teaching of Social Studies in the Elementary School. **Three hours.** A.

Emphasis on social education in elementary schools. New developments in social studies curricula are explored; issues in teaching social studies will be examined and evaluated.

ELE 664. Investigations in Language Arts. **One to Three hours.** A.

For students who desire to make a critical study of the investigative and theoretical literature dealing with the teaching of language arts (listening, spelling, handwriting, oral and written expression) in the elementary school. Research in the teaching of reading is not included.

ELE 665. Investigations in Reading. **One to Three hours.** II.

Prerequisite: Permission of the instructor.

Individual research and study of investigative and theoretical literature dealing with teaching of reading in the elementary school.

ELE 666. Investigations in Elementary School Mathematics. **One to Three hours.** II.

For students who desire to make critical study of investigative and theoretical literature dealing with teaching of mathematics in the elementary school.

ELE 667. Investigations in the Teaching of Social Studies. **One to Three hours.** A.

For students who desire to make critical study of investigative and theoretical literature dealing with teaching of social studies.

ELE 668. (Formerly ELE 576.) Techniques and Materials for Remedial Reading. **Three hours.** I, II.

Methods, materials and techniques appropriate to the correction of reading difficulties.

ELE 670. Trends in Elementary Science Education. **Three hours.** A.

Modern trends, practices, and foundation programs as they pertain to elementary and junior high science teaching. Major emphasis on laboratory investigations appropriate for elementary and junior high science. Five laboratory-discussion hours per week.

ELE 671. Reading Improvement in the Primary Grades. **Three hours.** A.

Intensive study of methods and materials appropriate for developing reading readiness and for guiding reading instruction in grades K-3. Emphasis upon the newer approaches and latest research.

ELE 672. Improving the Teaching of Mathematics in the Elementary School. **Three hours.** I, II.

Designed to help the experienced teacher and graduate student understand trends, issues, and concepts involved in initiating or continuing modern elementary mathematics programs. Influence of research findings on curriculum will be examined. Emphasis given to teaching of mathematics using multi-sensory materials.

ELE 673. Developmental Reading in the Elementary School. **Three hours.** I, II.

Advanced study of methods, materials, and organizational procedures appropriate for teaching developmental reading in the elementary school.

ELE 674. Improvement of Language Arts Instruction in the Elementary School. **Three hours.** A.

Examination of current trends and curriculum problems related to teaching of language arts in the elementary school. Major emphasis on listening, oral and written expression, spelling and handwriting. Attention is not given to the teaching of reading.

ELE 675. Diagnosis of Reading Problems. **Three hours.**

Prerequisite: ELE 668 or permission of instructor.

Theory and implementation of diagnostic procedures for the appraisal of reading problems. Emphasis on assessing quantity and quality of reading disabilities including psycholinguistic correlates.

ELE 676. Investigations in Elementary School Science. **One to Three hours.** A.

Prerequisite: Permission of the instructor.

Individual research and study of investigative and theoretical literature dealing with the teaching of science in the elementary school.

ELE 677. Practicum in Remedial Reading. **Three hours.** A.
Prerequisite: ELE 668 and ELE 675.
Supervised experiences in diagnosis and correction of reading problems.

ELE 678. Practicum in Elementary Mathematics Education. **Three hours.** A.
Prerequisite: ELE 672.
Practicum experiences in diagnosing children's problems in elementary school mathematics; observation and limited teaching to correct identified problems.

ELE 691. Issues and Trends in Elementary Education. **Three hours.** A.
Prerequisite: Permission of the instructor.
Under joint direction by elementary education faculty, this course is to be included in the student's first nine hours of specialist degree program. Opportunities provided for participation in discussion and analysis of critical issues relating to elementary education.

ELE 697. Independent Study. **One to Three hours.** I, II.
Primarily for advanced graduate students who desire to investigate special problems relating to elementary education.

ELE 698. Research Design in Elementary Education. **Two hours.** A.
A study of research and investigation in the area of specialization; identification of significant available findings, areas of needed study. Examination of experimental and research designs, appropriate laboratory methods. Designing a project.

ELE 699. Specialist Project. **Four hours.** A.
Guided development of a scholarly project appropriate to the student and his field of specialization. The project may be one of several types: a field project, creation of media or instructional instruments, or more formal types of research and inquiry.

LABORATORY SCHOOL

M. Combs, Cornelison, Creech, Daniel, Frye, S. Gibson, Hobekost, S. Hayes, G. Hays, M. Hendrix, R. Higginbotham, Hoffmann, S. Hollin, T. Hollin, C. Hurley, J. Isaacs, Johnson, Kearns, H. Kidd, P. Lane, McCann, McKay, McQueen, Metcalf, K. Mills, L. Murray, J. Myers, Ragland, Rankin, D. Smith, J. Tatum, R. Warren, Whitlock, Wickersham.

The Laboratory School is an integral part of the total teacher education program at Eastern. Three of its major purposes are (1) to provide a quality program of instruction for its own students; (2) to serve as a center for professional laboratory experiences for prospective and in-service teachers; and (3) to provide opportunities for research and experimental programs. Closed-circuit television connects the Laboratory School with the Bert Combs Building where classes in professional education are taught.

The Laboratory School enrolls approximately 700 students with a staff of forty full-time faculty members. It is located in the Donovan Building which was first occupied in 1961. The finest and most recent innovations of school architecture have been incorporated in this splendid building.

Pupils who attend the Laboratory School come from the city and county in the surrounding community. The number of pupils for each grade is limited. Listed below are the tuition fees:

Nursery school and kindergarten	$90.00 per semester
Grades 1-12	$30.00 per semester

LIBRARY SCIENCE (LIB)

Juanita Phillips, Chairman; Hatfield.

The major purposes of the Library Science program are to prepare school librarians and to provide a foundation for graduate study in the field of Librarianship. Students majoring in Library Science will be enrolled in the secondary education program and must have an approved second major on the secondary level. Students majoring in Elementary Education may minor in Library Science. In cooperation with the Graduate School, the department offers the following graduate degrees and/or programs.

Master of Arts in Education Degree
  Library Science
Rank II Certification (Fifth Year Non-degree Program)

Recommended Curriculum for a Major in Library Science (Teaching)

The first two years of this curriculum may be found in the Central University College section.

Third Year

First Semester	Hours	Second Semester	Hours
LIB 301	3	LIB 501	3
LIB 500	3	LIB 521	3
ELE 317	4	LIB 551	3
ENG 212, 350, or 351	3	LIB 563	3
GSS 248 or elective	3	ENG 350, 351, or elective	3
	16		15

Fourth Year

First Semester	Hours	Second Semester	Hours
LIB 531	3	LIB 541	3 or 4
LIB 569	3	ESH 498	4
LIB 561	3	ESH 499	8
ESH 574	3	Special Methods Course*	3
General electives	4		
	16		18 or 19

*To be taken in the student's second major teaching field.

Note: Library Science majors desiring 12-grade certification in Librarianship should include ELE 354 (Reading in the Elementary School) and ELE 541 (Survey of Elementary Curriculum Programs) in their programs.

Recommended Curriculum for a Second Major in Library Science (Teaching)

A student desiring a second major in Library Science must complete the following courses: LIB 300, 301, 500, 501, 521, 531, 541, 551, 569 and 561 or 563 ....30 or 31 semester hours

Requirements for a Minor in Library Science, (Teaching): LIB 301, 500, 501, 521, 531, 541, 569, and 551 or 561 or 563. 24 or 25 semester hours

Note: The Certificate for elementary school librarianship may be validated for the high school or twelve-grade librarianship upon the completion of ESH 498 (Fundamentals of Secondary Education) or a comparable course. The certificate for high school librarianship may be validated for the elementary school or for twelve-grade librarianship upon completion of ELE 541 (Survey of Elementary Curricular Programs) or a comparable course, and ELE 354 (Reading in the Elementary School) or a comparable course.

LIBRARY SCIENCE (LIB)

LIB 300. Libraries and Librarianship. **Three hours.** I.

Development of the library as a cultural, fundamental institution of society. School library objectives and standards; the librarian; classroom collections; county and regional library services; understanding of libraries and library work.

LIB 301. Children's Literature and Related Materials. **Three hours.** I, II.

Prerequisite: GSE 101 and 102; ENG 211 and 212.

For teachers and librarians planning to work with children. Emphasis on library materials to supplement school curriculum and encourage recreational reading grades 1-6. Stresses various types of materials for use by and with children; book selection; reading interests and needs.

LIB 500. Organization and Administration of the School Library. **Three hours. I, II.** School Library. **Three hours.** I, II.

Prerequisite: Admission to the Teacher Education Program.

Philosophy, objectives, and administration of the library in the elementary and secondary schools.

LIB 501. Young People's Literature. **Three hours.** I, II.

For teachers and librarians planning to work with young people. Emphasis placed on library materials to supplement school curriculum and encourage recreational reading in grades 7-12. Stresses reading interests, levels, and needs of young people, including types of adult materials suitable for more mature students and problems of selection.

LIB 521. Reference. **Three hours.** I, II.

Provides information for satisfactory use of library resources. Stresses essential reference work including dictionaries, encyclopedias, atlasses, yearbooks, periodical indexes, and the more important subject and trade bibliographies.

LIB 531. Classification and Cataloging. **Three hours.** I, II.

Fundamental principles and methods of classification and cataloging of books and related materials. Attention is centered on classification and cataloging of school library books.

Skill in typing is necessary.

LIB 541. School Library Practice. **Three or Four hours.** I, II.

Prerequisite: LIB 301, 500, 521 or 531.

Library practice is designed to give the trainee practical experience in many phases of school library service including circulation routines, teaching children the use of reference materials, and assisting in the cataloging of new books and materials. Reading guidance, story telling and the organization of unit materials are stressed.

LIB 551. Reading Interests and Advanced Book Selection. **Three hours.** A.

Role of reading in the educative process; reading habits and interests of groups and individuals; selection of readable materials. Methods of working with children and young adults in the school library; study in depth of titles suitable for children and young adults.

LIB 561. Non-Book Materials. **Three hours.** I.

Prerequisite: LIB 531.

Evaluation, selection, acquisition, cataloging, use, and preservation of all non-book materials (e.g. pamphlets, pictures, films, filmstrips, slides, transparencies, recordings) in a media center.

LIB 563. Preparation of Instructional Media. **Three hours.** II.

Selection and preparation of free and inexpensive materials; displays (boards, bulletin, flannel, magnetic, chalk, posters); graphics (maps, graphs, charts, diagrams); and models.

LIB 569. Instructional Media. **Three hours. I, II.**

Philosophy and techniques of the effective utilization of instructional media. Emphasis is on slides, tape and disc recordings, films, filmstrips, transparencies, programmed instruction, and the operation of equipment for presenting such media. (C. L. ESH 569).

GRADUATE COURSES

LIB 607. Problems in Library Science. **One to three hours.** A.

Prerequisite: Approval of advisor and chairman of the Department of Library Science.

Designed for graduate students who wish to do independent work on a problem in library science, or who wish to enroll in a special workshop or seminar focusing on a particular topic.

LIB 609. History of Books. **Three hours.** A.

Considers the records of early man, invention of the alphabet, manuscript books, and the making of books from earliest times to the present. Acquaints the student with the techniques and standards for the appraisal of the physical book.

SECONDARY AND HIGHER EDUCATION (ESH)

Joe Wise, Chairman; Arterberry, A. Chase, G. Creamer, McHome, McLendon, Owens, Randall, Stoess, Widener.

The Department of Secondary and Higher Education has undergraduate curricular responsibility for professional education courses in most secondary subject areas. The department provides for field supervision for secondary student teachers.

The department provides graduate level offerings in curriculum development, higher education, and the Master of Arts in Education degree with emphasis in Secondary Reading. The department cooperates with other academic departments in providing programs toward the Master of Arts in Education degree with emphasis in the subject matter field and non-degree fifth year programs.

ESH 125. Instructional Media Fundamentals I. **Three hours.** I.

Overview of the Instructional media field; sources, selection and cataloging; design principles applicable to instructional media; individual equipment operation and utilization.

ESH 126. Instructional Media Fundamentals II. **Three hours.** II.

Continuation of ESH 125 with emphasis on the fundamentals of dial-access systems, language laboratories, computer-assisted instruction, and programmed instruction; environmental factors affecting media utilization; reports and record keeping.

ESH 278. (Formerly MUS 378.) Music Education: Principles and Practices in Grades One through Twelve I. **Three hours.** I.

Prerequisite: Junior standing in music.

Designed to acquaint student with a balanced curriculum in music education in public schools. Emphasis placed on understanding and planning a developmental sequence of musical experiences to assure the sound musical growth of children and youth from kindergarten through the twelfth grade.

ESH 366. (Formerly HEC 366.) Methods of Teaching Home Economics. **Four hours.** II.

Prerequisite: EDF 202 and PSY 211.

Philosophy of home economics education methods of teaching in-school and out-of-school groups; selection, development and use of instructional materials.

ESH 379. (Formerly MUS 379.) Music Education: Principles and Practices in Grades One through Twelve II. **Three hours.** II.

Prerequisite: ESH 378.

Continuation of ESH 378.

ESH 440. (Formerly ART 461.) Teaching of Art in the Secondary School. **Three hours.** I, II.

Prerequisite: Open only to senior art students who plan to teach.

Relation of adolescent maturation levels and art experiences; planning for, organization and philosophy of art education in the secondary school.

ESH 441. (Formerly DIE 471.) Teaching of Biology in the Secondary School. **Three hours.** I, II.

Prerequisite: 24 hours of biology and approval of chairman of department.

Materials and methods in teaching biology in secondary schools; modern approaches to biology; organization, planning, directed observation, execution and evaluation of the classroom and laboratory activities; sources, preparation, and use of biological materials; planning construction, care and use of equipment; conduction of field trips.

ESH 442. (Formerly SPE 463.) Teaching of Speech in the Secondary School. **Three hours.** A.

Prerequisite: Major or minor in speech.

Principles and practice of speech education and its relation to other areas; special attention to content, materials, activities, textbooks, methods evaluation and problems.

ESH 443. (Formerly ENG 463.) Teaching of English in the Secondary School. **Three hours.** I, II.

Prerequisite: Major or minor in English.

Study of effective methods of introducing composition, grammar, and literature to the secondary school student; special emphasis on programming, lesson planning and evaluating.

ESH 444. (Formerly FRE 463.) Teaching of French in the Secondary School. **Three hours.** II.

Prerequisite: Major or minor in French.

Objectives, content, and methods of teaching French in the secondary schools.

ESH 445. (Formerly GER 463.) Teaching of German in the Secondary School. **Three hours.** II.

Prerequisite: Major or minor in German.

Objectives, content, and methods of teaching German in secondary schools.

ESH 446. (Formerly LAT 463.) Teaching of Latin in Secondary Schools. **Three hours.** I.

Objectives, content, and methods of teaching Latin in secondary schools.

ESH 447. (Formerly SPA 463.) Teaching of Spanish in the Secondary Schools. **Three hours.**

Prerequisite: Major in Spanish.

Objectives, content, and methods of teaching Spanish in secondary schools.

ESH 449. (Formerly HIS 466.) Teaching of Social Studies in the Secondary School. **Three hours.** I, II.

Trends and objectives of the social studies; techniques involved in the learning process; materials, both basic and supplementary, to enrich teaching; various methods of teaching; evaluation of learning processes; understanding of social studies as they develop civic competence and an understanding of social relations.

ESH 450. (Formerly MAT 467.) Teaching of Mathematics in the Secondary School. **Three hours.** I, II.

Prerequisite: Eighteen hours of college mathematics or consent of chairman.

Historical background of the mathematics curriculum; new developments in secondary school mathematics for the modern curriculum; improvement programs for school mathematics; examination of texts and materials; consideration of some of the newer topics, such as sets and bases other than ten.

ESH 451. (Formerly SCI 410.) Teaching of Physical Science in the Secondary School. **Three hours.** I, II.

Prerequisite: Major or minor in the physical sciences.

Review of fundamentals of chemistry and physics, with emphasis on applications to secondary school teaching of chemistry, physics, and physical science. Emphasis upon techniques that are useful in teaching principles of science in the classroom and in the laboratory. Attention will be given to new concepts in science education.

ESH 452. (Formerly IED 566.) Teaching of Industrial Arts in the Secondary School. **Three hours.** I, II.

Function and objectives of industrial arts; the industrial arts curriculum; methods of presentation; planning, equipping and organizing the laboratory; instructional materials; evaluation of student achievement.

ESH 453. (Formerly HEC 466.) The Home Economics Curriculum. **Three hours.** I, II.

Prerequisite: Consent of instructor.

Current trends in organization and content of home economics programs for secondary school students, out-of-school youth, and adults; curriculum planning. Organization and administration of the department. Construction and use of evaluation instruments in home economics.

ESH 454. (Formerly BED 461.) Materials and Methods of Teaching Shorthand. **One hour.** I, II.

Prerequisite: OAD 116.

Methods, techniques, and devices for teaching shorthand.

ESH 455. (Formerly BED 462.) Materials and Methods in Teaching Bookkeeping, Basic Business, and Typewriting. **Three hours.** I, II.

Prerequisite: OAD 253, ACC 126 or its equivalent, and two courses in Business.

Methods, materials, and techniques used in the teaching of bookkeeping, typewriting, and the basic business subjects.

ESH 456. (Formerly BED 450.) Special Problems in Business Education. **One to three hours.**

Prerequisites: Senior standing and permission of department chairman.

Study of significant problems, teaching methods, and research findings in business education; enrollment limited to students in business teacher education.

ESH 457. (Formerly MUS 367.) Instrumental Methods and Materials. **Two hours.** I, II.

Designed to acquaint the student with the role, objectives and methods of instrumental music in the public schools.

***ESH 458.** (Formerly MUS 368.) Choral Methods and Materials. **Two hours.** I, II.

Designed to acquaint the student with the role, objectives and methods of choral music in the public schools.

ESH 461. (Formerly BED 461.) Methods and Materials in Teaching and Coordinating Distributive Education. **Three hours.** II.

Prerequisite: DED 460.

Methods, materials and techniques for teaching and coordinating in distributive education programs.

ESH 466. (Formerly PHE 466.) Teaching of Physical Education in the Secondary School. **Three hours.** I, II.

Theories of play and study of existing play programs; correlation with other subjects; games skills, lesson planning, observation, and demonstration teaching.

ESH 498. (Formerly EDU 462.) Fundamentals of Secondary Education. **Four or Six hours.** I, II.

Prerequisite: EDF 202 or 300, and 317.

Graduated approach to responsible classroom teaching through experiences in study and discussion, organizing materials, directed observation, laboratory work, and other pre-student teaching experiences.

ESH 499. (Formerly EDU 463.) Supervised Student Teaching. **Eight or Ten hours.** I, II.

Prerequisite: ESH 498.

Observation, participation, and responsible classroom teaching along with related professional activities.

ESH 499s. (Formerly EDU 463s.) Laboratory Experiences in Secondary Education. **Eight hours.** Offered only in Summer Session.

Prerequisite: ESH 498.

Designed to meet the needs of experienced teachers who have taught on a full-time basis for a period of three years on a legal certificate and who are qualified under the regulations of the State Board of Education to use this course as a substitute for any part or all of Student Teaching.

ESH 501. (Formerly EDU 501.) The Junior High School. **Two hours.** A.

Origin, development, and present status of the junior high school movement; the place of the junior high school in the public school system; the aims, purposes, and objectives of the junior high school; evaluation of types of programs; the junior high school plant; library, apparatus, and equipment of the junior high school.

ESH 507. (Formerly EDU 507.) Problems in Secondary Education. **One to Three hours.** A.

Prerequisite: Approval of advisor and the chairman of the department.

Independent work, special workshop, special topic, or seminar.

ESH 569. (Formerly EDU 569.) Instructional Media. **Three hours.** I, II.

Philosophy and techniques of the effective utilization of instructional media. Emphasis is on slides, tape and disc recordings, films, filmstrips, transparencies, programmed instruction, and the operation of equipment for presenting such media. Sources of materials will be discussed. (C.L. LIB 569.)

ESH 574. (Formerly EDU 574.) Teaching Reading in the Secondary School. **Three hours.** A.

Prerequisite: EDF 317, admission to Teacher Education Program.

Designed to assist the secondary teacher in teaching reading in the content areas. Includes emphasis on developmental reading, reading skills, (vocabulary development, critical reading, concentration, and study techniques). Attention is given to appraisal of reading abilities, appropriate materials, evaluation, and organization of reading programs at the secondary level.

ESH 575. Advanced Materials and Methods for Modern Biology Teaching. **Three hours.** A.

Materials and methods of teaching modern biological science at the secondary level. The application of modern learning theories and psychological foundations with their implications for modern science curricula.

GRADUATE COURSES

ESH 612. Curriculum Development. **Two hours.** II.

Critical study of issues and problems in curriculum development, the rationale underlying major positions of these issues, implications for work at various levels of the educational program, and principles and techniques of curriculum change.

ESH 628. Instructional Television. **Three hours.** A.

Exploration of television as a teaching tool. Theory and practice of planning the utilization of instructional television programs and courses. Emphasis on the cooperative role of the producer-director. The part of the television-studio teacher and the part of the television-classroom teacher is explored. History of educational television, television research, and the literature in the field are included. Supervised critical viewing of course segments is an integral part of the course.

ESH 655. Integration of Modern Curriculum and Learning Principles. **Four hours.** I, II.

Study of issues and problems in curriculum development with emphasis on the application of principles of learning to curriculum decisions. These decisions relate to such areas as the selection and guidance of learning experiences at various levels of the educational program and to principles and techniques for curriculum change.

ESH 663. Secondary School Curriculum. **Three hours.** II.

Aims of the public secondary schools; plans for evaluating curriculum procedures; qualities of good teaching; procedures of evaluating and improving classroom teaching; methods of making the school a more effective agency.

ESH 680. Organization and Supervision of Student Teaching. **Three hours.** I.

Prerequisite: Teaching experience.

For school and college personnel concerned with improving student teaching experiences.

ESH 685. Seminar: Problems in the Supervision of Student Teaching. **Three hours.** A.

Prerequisite: ESH 680 and prior or current experience with student teachers.

Designed to provide opportunity for school and college personnel to explore in depth problems and procedure relating to the supervision of student teaching. Direct experience will be an aspect of the critical study of individual and group problems.

ESH 690. College Teaching. **Three hours.** II.

Designed for students who are teaching or who expect to teach in junior or senior colleges. Critical exploration of the major decisions to be made by the college teacher in the changing scene in higher education. Attention will be given to knowing students as individuals and class groups, planning college courses, practical problems of selecting and guiding learning experiences, using varied instructional media, evaluating student progress.

ESH 691. The Community Junior College. **Three hours.** A.

Designed for the prospective or in-service junior college teachers or administrators. Attention will be given to the philosophy, objectives, organization, and operation of community junior colleges. Stress will be placed on the unique role of the junior colleges in American higher education and the rapidly evolving nature of the two-year colleges.

ESH 695. Perspectives in Higher Education. **Three hours.** I.

Origins, evolution, and trends in post-secondary education; the technical school, the junior college movement, the role of public and private colleges and universities in American education. Stress will be placed upon the sociology of higher education.

ESH 696. Theories of College Teaching. **Three hours.** II.

Prerequisite: ESH 695 or permission of instructor.

Psychology of college youth; a survey of cognitive and affective systems; the development of a system of instructional principles; and over view of standardized and classroom evaluation. Direct experience a requirement.

ESH 697. Curriculum in Higher Education. **Three hours.** II.

Issues, trends, and principles in curriculum development in higher education; the nature, place, and interrelationship of general education and work in fields of specialization. Opportunity for students from various fields to observe and appraise innovative practices, and to project programs of higher education.

ESH 698. Seminar in College Teaching. **One hour.** I, II.

Taken concurrently with ESH 699. Topics in higher education. A research paper is required one semester. Restricted to candidates for the Specialist Degree.

ESH 699. Practicum in Higher Education. **Three hours.** I, II.

Supervised teaching in an acceptable post-secondary school or college. Restricted to candidates for the Specialist Degree.

SPECIAL EDUCATION AND REHABILITATION (SEB & RHB)

Wietse de Hoop, Chairman; Dettre, S. Harris, Roberts, White.

The Department of Special Education and Rehabilitation prepares speech pathologists, rehabilitation educators, and special teachers. Programs are offered for teachers of the educable or trainable mentally retarded, for children with behavior disorders (emotionally disturbed) and/or learning disabilities (neurologically impaired), in rehabilitation education, and in speech pathology and audiology. In cooperation with the Graduate School the department offers the following degree program:

Master of Arts in Education Degree
Special Education

Curriculum for Dual Certification in Special Education and Elementary Education

Endorsement for teaching special education in the areas of mental retardation and behavior disorders and learning disabilities is available to interested persons who are majoring in elementary education. Completion of one of the following fifteen hour programs—in addition to the regular program for elementary education—is required:

Mental Retardation

SED 345.	Introduction to Education of Exceptional Children	3 hrs.
SED 360.	Speech and Language Development	3 hrs.
SED 521.	Mentally Retarded Children	3 hrs.
SED 534.	Teaching the Educable Mentally Retarded Child	
or		
SED 535.	Teaching the Trainable Mentally Retarded Child	3 hrs.
Electives:	SED 522, 523, or 541	3 hrs.
		15 hrs.

Behavior Disorders and Learning Disabilities

SED 345.	Introduction to Education of Exceptional Children	3 hrs.
SED 360.	Speech and Language Development	3 hrs.
SED 522.	Behaviorally Disordered and Socially Deviant Children	3 hrs.
SED 523.	Learning Disabilities in Children	3 hrs.
SED 536.	Teaching Children with Behavior Disorders and Learning Disabilities	3 hrs.
		15 hrs.

All Students

*SED 599.	Supervised Practicum in Special Education	5 hrs.

*Undergraduate students take SED 599 simultaneously with ELE 499 during the professional semester. Students will earn 5 hrs. for each course, ELE 499 and SED 599. Approximately one-half of the supervised student teaching will be done in regular elementary classes; the other half of the student teaching will be done in special classes in the selected area of exceptionality.

Curriculum for a major in Speech Pathology and Audiology
(Teaching and Non-Teaching)

The first two years of the curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
PSY 314	3	Gen. Ed. Sci. Elective	3
SED 360	3	SED 370	3
SED 373	2	SED 378	2
SED 380	3	SED 385	3
Gen. Ed. Lit. GSH seq. or Elective	3	Humanities Elec. or PSY 301*	3
SED 345	3	PSY 308	3
	17		17

Fourth Year

First Semester	Hours	Second Semester	Hours
SED 480	3	SED 475	3
SED 470	3	SPE 450	3
SED 511	3	PSY 498*	3
PSY 301*	3	Electives	6-9
Electives	3-6		
	15-18		15-18

*PSY 301 and PSY 498 are required for the non-teaching majors only.

Curriculum for a major in Rehabilitation Education (RHB)
(Non-Teaching)

The first two years of the curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
RHB 401	3	RHB 402	3
PSY 302	3	RHB 451	2
SWK 370	3	PSY 308	3
Electives or minor req.	7	SWK 415	3
		Electives or minor req.	5
	16		16

Fourth Year

PSY 402	3	RHB 502	6
SOC 400	3	Electives or minor req.	10
RHB 401	3		
Electives or minor req.	7		
	16		16

SPECIAL EDUCATION (SED)

SED 270. (Formerly SPE 270.) Basic Speech Science. **Three hours.** II.
Study of the anatomy, physiology, and neurology of the organs of respiration, phonation, articulation, resonation, and hearing.

SED 275. (Formerly SPE 275.) Speech Pathology: A Survey. **Three hours.** I, II.
Introduction to the nature and causes of the major disorders of speech; articulation, voice, stuttering; speech problems associated with neural injury, anatomical anomalies, and hearing impairment.

SED 345. Introduction to the Education of Exceptional Children. **Three hours.** II.
Introduction to the characteristics, problems and educational provisions for children who are exceptional because of mental retardation, giftedness, social or emotional problems, speech defects, defects of vision or hearing, crippling and special health problems or learning disabilities.

SED 360. (CL SPE 360) Speech and Language Development. **Three hours.** I.
Normal patterns of speech and language acquisition; application of learning theory and linguistic concepts.

SED 370. (Formerly SPE 370.) Speech Pathology: Disorders of Speech. **Three hours.** II.
Prerequisite: SPE 275.
Study of the etiology, principles of diagnosis, and treatment of disorders of speech.

SED 373. (Formerly SPE 373.) Introduction to Speech Therapy. **Two hours.** I.
Prerequisite: SPE 275.
Should read as follows: Observation and discussion of therapy; limited supervised experience using techniques and procedures of speech therapy.

SED 378. (Formerly SPE 373.) Speech Pathology: Methods and Materials. **Two hours.** II.
Prerequisite: SED 275.
Procedures of examination for disorders of voice and articulation: interviewing for information: therapy materials for use with children and adults.

SED 380. (Formerly SPE 380.) Introduction to Clinical Audiology. **Three hours.** I.
A survey of the profession of audiology: a study of the anatomy, physiology, and acoustics of hearing; principal types of hearing loss.

SED 385. (Formerly 385.) Audiometry. **Three hours.** II.
Prerequisite: SPE 380.
Basic clinical techniques for assessing hearing acuity. Included: identification audiometry, pure tone threshold determination, speech audiometry, and concepts underlying interpretation of hearing tests.

SED 470. (Formerly SPE 470.) Clinical Practice in Speech and Hearing Therapy I. **Three hours.**

Supervised clinical experience in therapy in speech and hearing disorders. Permission of department required.

SED 475. (Formerly SPE 475.) Clinical Practice in Speech and Hearing Therapy II. **Three hours. II.**

Continuation of SPE 470. Supervised clinical experience in therapy of speech and hearing disorders. Permission of department required.

SED 480. (Formerly SPE 480.) Rehabilitation for the Aurally Handicapped. **Three hours. I.**

Prerequisite: SED 380.

Auditory training, speech reading, speech conservation. Hearing aid counseling for children and adults, language training for the hearing impaired preschool and elementary school child.

SED 507. Problems in Special Education. **1-3 hours.** A.

Prerequisite: Approval of advisor and the chairman of the department.

For school-related work, special workshops, special seminars.

SED 511. (Formerly EPG 511.) Psychological Aspects of Exceptional Children. **Three hours. I.**

Study of selected psychological aspects of exceptionality. Emphasis is on aspects relevant to the teacher training programs offered. Students select two major and two related aspects acceptable to the major professor.

SED 521. Mentally Retarded Children. **Three hours.** I.

Mental retardation as an educational, psychological and social problem. Characteristics, identification, prevalence and educational provisions.

SED 522. Behaviorally Disordered and Sociallly Deviant Children. **Three hours. I.**

Definition and description of behavior disorders in childhood including a study of major theoretical bases for child therapy. Concurrent laboratory experiences with individual child therapy and development of a case study.

SED 523. Learning Disabilities in Children. **Three hours. II.**

Definition and description of learning disabilities in childhood with an emphasis on physiological and neurological correlates of disability and their assessment.

SED 534. Teaching the Educable Mentally Retarded. **Three hours.** A.

Curriculum, methods and materials for teachers of the mildly retarded with emphasis on individualized instruction. Individual and small group tutoring. Two lecture and two laboratory hours.

SED 535. Teaching the Trainable Mentally Retarded. **Three hours.** A.

Same as SED 534, for teachers of the severely retarded.

SED 536. Teaching Children with Behavior and Learning Disabilities. **Three hours.** A.

Academic remediation and therapy for children with behavior and learning disabilities including behavior management techniques and methods and materials for preceptual and conceptual training. Laboratory experience will consist of individual and small group tutoring. Two lecture and two laboratory hours.

SED 541. Behavior Modification of Exceptional Children. **Three hours.** A.

Directive and non-directive techniques used in educating exceptional children, with emphasis on operant conditioning. Two lecture and two laboratory hours.

SED 560. Introduction to Speech Correction. **Three hours.** A.

Designed to help identify and deal with speech defects. Study of basic typed of disorders, emphasis on good environment for the handicapped and sources of specialized help.

SED 570. Directed Study in Speech Pathology. **One to three hours.** A.

Directed projects in speech pathology. Proposal for the project must be submitted one semester in advance. Departmental permission is required.

SED 580. Directed Study in Audiology. **One to three hours.** A.

Directed projects in audiology. Proposal for the project must be submitted one semester in advance. Departmental permission is required.

SED 599. Supervised Practicum in Special Education. **Five hours.**

Observation, participation and teaching in special classes in the selected area of exceptionality; participation in professional activities.

GRADUATE COURSES

SED 610. Ecology of the Special Classroom. **Three hours.** A.

Human interrelationships in, and the impact of the spatial organization of the special classroom. Dyadic interaction as the basis for individualized instruction of exceptional children. Group formation, leaderships; monitoring teacher and student behaviors as an instrument of change. Prosthetic and responsive environments.

SED 611. Bio-medical Aspects of Exceptional Children. **Three hours.** A.

Implications of biological (including genetic) differences, and the medical treatment of such differences, for special educators, counselors and other educational personnel.

SED 615. Administration of Special Education. **Three hours.** A.

Administration as a catalyst in special education; societal rules and regulations regarding education of exceptional children at the local, state and federal levels, with emphasis on Kentucky's teacher education certification program. Cooperative programs of special education and rehabilitation education.

SED 631. Case Studies I: Mental Retardation. **Three hours.** II.

Study of: a. methods of identification, diagnosis and characteristics; b. behavioral management in the total educational setting; c. teaching methods and materials. The total program of studies, organized into detail, is in the form of case studies performed by the student.

SED 632. Case Studies II: Behavioral Disorders and Learning Disabilities. **Three hours.** II.

Same as SED 631.

SED 685. Independent Project. **Three hours.** A.

Study of some topic (other than research) which is of interest to the student and to his major professor, and which is of importance to special education in the geographic area, or in general. Topic must provide for considerable investigation and study.

SED 686. Research Project. **Three hours.** A.

Same as SED 385, but topic must call for an original investigation.

SED 691. Foundations of Special Education. **Three hours.**

Study of the defining characteristics of special education and its place in the total of American education and society.

REHABILITATION (RHB)

RHB 300. Introduction to Rehabilitation. **Three hours.** A.

Nature of disability and disadvantage are discussed. History, philosophy, and current trends in rehabilitation.

RHB 401. Physical Disabilities: Implications for Rehabilitation. **Three hours.** I.

Survey of the various physical conditions and diseases which entitle an individual to rehabilitation services. Causes, treatment, common readjustment problems in home and community, and employment prognoses are discussed.

RHB 402. Mental Disabilities and Behavior Disorders: Implications for Rehabilitation. **Three hours.** II.

Survey of various mental disabilities and behavior disorders which entitle an individual to rehabilitation services. Rehabilitation professionals work in mental hospitals, institutions for delinquents and penal institutions is emphasized. Problems of readjustment in home and community, and employment possibilities are discussed.

RHB 451. Problems in Vocational Rehabilitation. **Two hours.** II.

Provides a survey of the trades, industrial and business careers and the professions with emphasis on implications for disabled individuals.

RHB 501. The Rehabilitation Counselor. **Three hours.** I.

Opportunities for observing rehabilitation settings and talking with rehabilitation professionals will be provided. Government agencies and private programs at the local, state, and federal level are studied.

RHB 502. Practicum. **Six hours.** I, II.

Supervised field experiences in rehabilitation. Rehabilitation majors are placed in a field situation of their choice to work under the direct supervision of a rehabilitation counselor or professional worker. Departmental seminar and individual conferences are held weekly to support and evaluate the field experiences.

SCHOOL OF HEALTH, PHYSICAL EDUCATION, RECREATION AND ATHLETICS

Ned L. Warren, Director

The School of Health, Physical Education, Recreation and Athletics has undergraduate curricular responsibilities for professional students in health, physical education and recreation as described on the following pages. In addition, the School, in cooperation with the Graduate School and the College of Education, offers the following graduate degrees and/or programs:

- Master of Arts in Education Degree
  - Physical Education
- Master of Science Degree
  - Physical Education
- Rank II Certification (Fifth Year Non-degree Program)
- Rank I Certification (Sixth Year Non-degree Program)
- Specialist in Education Degree
  - Physical Education
  - Physical Education for College Teachers

For additional information regarding these programs, contact the office of the director of the School or consult the Graduate Catalog.

PHYSICAL EDUCATION FOR MEN (PHE)

Fred E. Darling, Chairman; J. Adams, D. Combs, Deck, Gentry, Holmes, Hughes, Kidd, Lichty, Motley, O. Phillips, Presnell, Strong.

Men may take an area in Health, Physical Education and Recreation with the right of teaching certificate by taking a minimum of 48 semester hours in these fields.

A minimum of 30 semester hours will be required for a major in Physical Education with the right of a teaching certificate.

A minor in Physical Education will require 21 semester hours.

Area students and those taking a major in Physical Education will be required to take GSC 162 or 261, and BIO 301.

Curriculum for an area in Health, Physical Education and Recreation (teaching)—Men.

PHE 125, 215, 216, 300, 320, 322* 325, 326, 367, 368, 400, 562, 568, 575; 4 hours elective from PHE 261, 360, 361, 362, 420 and 440. HEA 202, 315, 410, 380, 487. REC 201, 501.

Curriculum for a major in Physical Education (teaching and non-teaching)—Men.**

PHE 125, 215, 216, 300, 320, 322*, 325, 326, 367, 368, 400, 562, 568, 575; 4 hours elective from PHE 261, 360, 361, 362, 420 and 440.

*This course (PHE 322) and ELE 541 is required only for those students desiring both elementary and secondary certification.

**Male student majors in Physical Education desiring an emphasis in corrective therapy will be required to spend ½ of their student teaching experience in clinical affiliation with the Veterans Administration Hospital in Lexington.

Curriculum for a second major in Physical Education (teaching and non-teaching)—Men is the same as shown for the first major.

Curriculum for a minor in Physical Education (teaching and non-teaching)—Men.

PHE 125, 215, 216, 300, 322, 367, 368, 568, 575; 4 hours elective from PHE 261, 360, 361, 362, 400, 420 and 440.

PHYSICAL EDUCATION FOR MEN (PHE)

Curriculum for an area in Health, Physical Education and Recreation (Teaching)—Men. The first two years of this curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	HEA 380	2
HEA 410	2	PHE 320	2
HEA 315	2	PHE 322* or Gen. Ed. Requirement, or elective	2-3
PHE 300	2	PHE 326	3
PHE 325	3	PHE 368	1
PHE 367	1	REC 201	3
General Education Requirement	3	PHE 400	3
	17		16-17

Fourth Year

First Semester	Hours	Second Semester	Hours
ELE 541* or elective	3	ESH 498	4
HEA 487	3	ESH 466	3
PHE 562	2	ESH 499	10
REC 501	3		
PHE 568	2		
PHE 575	3		
Elective Coaching or Officiating	2		
	18		17

*These courses (PHE 322 and ELE 541) are required only for those students desiring both elementary and secondary certification.

Curriculum for a major in Physical Education (teaching and non-teaching)—Men. The first two years of this curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	PHE 320	2
PHE 300	2	PHE 322* or Gen. Ed. Requirement, or elective	2-3
PHE 325	3	PHE 326	3
PHE 367	1	PHE 368	1
Elective Coaching	2	Elective	9
General Education Requirement	3		
Elective	2		
	17		17-18

Fourth Year

First Semester	Hours	Second Semester	Hours
ELE 541* or elective	3	ESH 498	4
PHE 568	2	ESH 466	3
PHE 575	3	ESH 499	10
Elective Coaching or Officiating	2		
PHE 562	2		
Elective	4		
	16		17

*These courses (PHE 322 and ELE 541) are required only for those students desiring both elementary and secondary certification.

PHYSICAL EDUCATION FOR WOMEN (PHE)

Ann Uhlir, Chairman; D. Harkins, Jinks, Kirkpatrick, Maupin, Mullins, Polvino, Stanaland, Welch.

A woman may take a single major in Physical Education with right of teaching certificate by completing a minimum of 36 semester hours in physical education. She may take an area in Health, Physical Education and Recreation with right of teaching certificate by completing a minimum of 48 semester hours in these three disciplines. A woman may minor in Physical Education by completing a minimum of 21 semester hours. These hours must be taken as described by the course sequences and curricular blocks for these majors.

Curriculum for a major in Physical Education (teaching and non-teaching)—Women.

PHE 125, 207, 208, 241, 300, 310, 311, 320, 322, 325, 326, 340 or 341, 345, 365, 380 or 381, 510, 568, 575.

Curriculum for an area in Health, Physical Education and Recreation (teaching)—Women.

PHE 125, 207, 208, 241, 300, 310, 311, 320, 322, 325, 326, 340 or 341, 345, 365, 380 or 381, 510, 562, 568, 575.

REC 201 or 310, and 402.

HEA 202, and 375 or 380.

Electives: PHE 380, 381 or 554 (1 or 2 hours).

Curriculum for a minor in Physical Education (teaching and non-teaching)—Women.

PHE 125, 207, 208, 241 or 341, 300, 310, 345, 365, 380 or 381, 510, 575.

PHYSICAL EDUCATION FOR WOMEN (PHE)

Curriculum for an area in Health, Physical Education and Recreation (teaching)—Women. The first two years of this curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	PHE 310 or 311	2
HEA 375 or 380	2	PHE 320 or 325	2-3
PHE 310 or 311	2	PHE 322 or 345	2
PHE 320 or 325	2-3	PHE 326	3
PHE 322 or 345	2	PHE 341 or 381	1
PHE 341 or 380	1	PHE 365	2
REC 302	2	*REC 201 or 410	3
	15-16		15-16

Fourth Year

First Semester	Hours	Second Semester	Hours
ELE 541	3	ESH 498	4
PHE 510	2	ESH 499	10
PHE 562	2	ESH 466	3
PHE 568	2		
PHE 575	3		
PHE elective	1-2		
Elective	2		
	15-16		17

*Not required if REC 201 was completed in CUC.

Curriculum for a major in Physical Education (teaching and non-teaching)—Women. The first two years of this curriculum may be found in the Central University College Section.

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	PHE 310 or 311	2
PHE 310 or 311	2	PHE 320 or 325	2-3
PHE 320 or 325	2-3	PHE 322 or 345	2
PHE 322 or 345	2	PHE 326	3
PHE 365	2	PHE 341 or 381	1
PHE 341 or 380	1	Minor elective or electives	6
Minor elective or electives	3		
	16-17		16-17

Fourth Year

First Semester	Hours	Second Semester	Hours
ELE 541	3	ESH 498	4
PHE 510	2	ESH 499	10
PHE 568	2	ESH 466	3
PHE 575	3		
Minor elective or electives	6		
	16		17

PHYSICAL EDUCATION (PHE)

PHE 125. Introduction to Physical Education. **Two hours.** I, II.
Orientation to the profession. Includes philosophy, aim, objectives, scope, interdisciplinary bases, current problems, professional leadership, publication, and career opportunities.

PHE 207. Field Hockey, Soccer and Volleyball for Women. **Two hours.** I.
Rules, basic skills, strategy, and teaching techniques related to field hockey, soccer and volleyball for women.

PHE 208. Basketball, Softball, Track and Field for Women. **Two hours.** II.
Rules, basic skills, strategy and teaching techniques related to basketball, softball, track and field for women.

PHE 215. Skills and Physical Education Activities (Men). **Two hours.** I, II.
Study and practice of various skills required for participation in a variety of individual and team sports.

PHE 216. Skills in Physical Education Activities (Men). **Two hours.** I, II.
Continuation of Physical Education 215.

PHE 241. Swimming and Diving. **One hour.** I, II.
Prerequisite: GSP 180 or 181 Swimming or permission of the instructor.
Introduction to and fundamentals of basic swimming strokes, elementary diving, and self preservation.

PHE 261. Coaching Baseball. **Two hours.** I, II.

Theory and practice in coaching the fundamentals of baseball; team offense and defense.

PHE 300. Social, Folk, and Square Dance. **Two hours.** I, II.

Presentation of American and international folk dances, and American ballroom dances. Understanding of basic terms; interpretation and appreciation of customs, traditions, and origins of other peoples; and techniques of leading or directing social dance activities.

PHE 310. Tennis, Badminton, and Recreational Sports for Women. **Two hours.** I, II.

Rules, skills, etiquette, strategy, and officiating relating to life-time sports with emphasis on tennis, badminton and selected recreational sports.

PHE 311. Bowling, Archery, and Golf for Women. **Two hours.** I, II.

Rules, skills, etiquette, and strategy relating to individual and dual sports with emphasis on bowling, archery, and golf.

PHE 320. Kinesiology. **Two hours.** I, II.

Prerequisite: BIO 301.

Fundamentals of body mechanics; movements of the human body.

PHE 322. Physical Education in the Elementary School (Grades 1-6). **Two hours.** I, II.

Theory and practice in the conduct of physical education for children in the elementary grades. Four laboratory hours.

PHE 325. Physiology of Activity. **Three hours.** I, II.

Prerequisite: BIO 301.

Effects of physical education activities on the various systems of the human body. Principles and approaches to physical conditioning will be studied. Two lecture hours and two laboratory hours.

PHE 326. History and Principles of Physical Education. **Three hours.** I, II.

Prerequisites: GSS 246 and GSS 247.

Designed to develop understanding of the principles of a good physical education program. Contributions of historical programs to present day programs studied and evaluated.

PHE 340. Advanced Swimming and Water Leadership. **Two hours.** II.

Prerequisite: GSP 180 (Swimming or equivalent). Waived if student can pass skill test.

Emphasizes advanced skills and water safety, proper conduct of competitive swimming meets, pool management, lifeguarding and pool filtration. Red Cross Instructors (WSI) rating given to those who qualify.

PHE 341. Speed and Synchronized Swimming. **One hour.** I, II.

Prerequisite: PHE 241 or permission of the instructor.

Introduction to and fundamentals of synchronized swimming, speed swimming, and conduct of competitive swimming events.

PHE 345. Fundamentals of Creative Movement. **Two hours.** I, II.

Introduction to modern dance and fundamentals of movement and rhythm.

PHE 350. Dance Production and Workshop I & II. **One-half hour.** I, II.

Prerequisite: Consent of the instructor.

May be repeated once for credit.

Opportunities for preparation, production and performance of individual and group modern dance compositions, culminating in a concert presentation. Three or more hours of rehearsal per week.

PHE 360. Coaching Basketball. **Two hours.** I, II.

Theory and practice in coaching the fundamentals of basketball; team offense and defense.

PHE 361. Sports Officiating. **Two hours.** I, II.

Theory and practice of officiating sports and games. Emphasis placed on studying and interpreting rules, and techniques of officiating. One hour lecture, two hours laboratory.

PHE 362. Coaching Track and Field. **Two hours.** II.

Theory and practice in coaching fundamentals involved in track and field.

PHE 365. Gymnastics for Women. **Two hours.** I, II.

Fundamentals of stunts and tumbling leading to instruction in events for women's competitive gymnastics: free exercise, vaulting, uneven bars, balance beam, and trampoline.

PHE 367. Basic Tumbling and Apparatus Activities. **One hour.** I, II.

Exercises and stunts upon the horizontal bar, parallel bars, trampoline, long horse, and horse with pommels for the prospective tumbling, and apparatus teacher. Safety methods, squad procedures, and pupil leadership stressed.

PHE 368. Advanced Tumbling and Apparatus Activities. **One hour.** I, II.

Continuation of PHE 367 with emphasis on series exercises on the mats, trampoline, parallel bars, horse with pommels, and horizontal bar.

PHE 380. Officiating Team Sports I (Women). **One hour.** I.

Prerequisite: PHE 207.

Techniques and skills of officiating, structure of officiating within girl's and women's sports, and relationship between performance, behavior, and the official's duties with emphasis on officiating soccer, field hockey, and volleyball.

PHE 381. Officiating Team Sports II (Women). **One hour.** II.

Prerequisite: PHE 208.

Continuation of PHE 380 with emphasis on techniques and skills of officiating basketball, softball, and track and field.

PHE 400. Organization of School Recreation Activities. **Three hours.** I, II.

Problems related to directing recreational activities within a school system. Two hours of laboratory assigned each student.

PHE 420. Coaching Football. **Two hours.** I, II.

Theory and practice in coaching the fundamentals of football; team offense and defense.

PHE 440. Coaching Swimming and Diving. **Two hours.** I, II.

Prerequisite: PHE 340 or equivalent.

Designed to develop a body of knowledge concerning philosophy, rules, strategy, mechanics, and organization involved in developing and administering swimming and diving programs.

PHE 510. Non-Class Curricular Physical Education Activities for Women. **Two hours.** I, II.

Policies, principles and philosophy of participation in physical education programs for women. Attention given to intramurals, extramurals, sports days, play days, girls athletic and recreation associations, coaching women's sports, and administration of women's sports programs.

PHE 521. Developmental Physical Education. **Three hours.** A.

Prerequisite: EDF 317 or equivalent.

Developmental movement activities which are basic to readiness for performance at school—techniques of movement experiences and activities aimed at the prevention or ameliorating of learning disabilities.

PHE 550. Advanced Dance Production and Workshop I & II. **One-half hour.** I, II.

Prerequisite: Consent of the instructor.

May be repeated once for credit.

Opportunities for directing the preparation, production, and performance of dance compositions culminating in a concert presentation. Three or more hours per week.

PHE 554. (Formerly PHE 354.) Modern Dance Technique and Choreography. **Two hours.** I, II.

Prerequisite: PHE 345.

Modern dance technique, improvisation, choreography and production.

PHE 562. Physical Education for the Exceptional Child. **Two hours.** I, II.

Prerequisite: PHE 320 and 325.

Emphasis on conditions producing exceptional children; classification of atypical cases, purposeful physical education activities for exceptional children; and application of adaptive physical education activities.

PHE 568. Administration and Organization of Physical Education. **Two hours.** I, II.

Policies and procedures of administration on the elementary and secondary school level. Emphasis on construction and care of facilities, equipment, and supervision of personnel.

PHE 575. Tests and Measurements in Physical Education. **Three hours. I, II.**

Administration and scoring of tests; evaluation and use of results obtained.

PHE 590. Workshop in Physical Education. **One to four hours.** A. (This course may be repeated but credit will not be awarded for two workshops by the same sub-title.)

Identification and study of significant problems, teaching methods, research findings, evaluation techniques and the use of appropriate demonstrations and participation important to the improvement of teaching.

PHE 596. Workshop for Elementary Teachers in Physical Education Activities. **Three hours.** A.

Comprehensive review of techniques used in teaching physical education in the elementary grades. Emphasis placed on health evaluation, fitness testing, rhythmical activities, game activities, tumbling and self-testing activities.

GRADUATE COURSES

PHE 620. Administration of Physical Education. **Three hours. I.**

Procedures, policies, and problems relating to administrative functions of physical education administration. Topical areas include program, facilities and equipment, public relations, personnel, finances and supervision.

PHE 621. Scientific Bases of Physical Education. **Three hours. I.**

Biological, sociological, and psychological interpretations of man as related to performance in physical education activities.

PHE 622. Sociology of Sport. **Three hours. II.**

Meaning of sport in contemporary societies and the impact of social order on development of attitudes about and promotion of amateur and professional sports.

PHE 623. Professional Preparation in Health, Physical Education and Recreation. **Three hours. II.**

Study of undergraduate curricula designed to prepare health, physical education, and recreation specialists with attention to curriculum development, recruitment, selective admission and retention, certification, placement, and follow-up procedures.

PHE 624. Contemporary and Comparative Physical Education. **Three hours. II.**

Current trends in physical education resulting from political, sociological, and religious implications of various cultures of man.

PHE 649. Philosophical Bases of Physical Education. **Three hours. I.**

Development of philosophical approaches to physical education with an aim for discovering underlying principles on which physical education is based. Readings and discussion will relate to philosophical interpretations on questions of learning, curriculum, and administration, evaluation, and values.

PHE 650. Curriculum Designs in Physical Education. **Three hours. I.**

Problems relating to design of programs in physical education. Curriculum project developed by each student.

PHE 651. Equipment and Facilities in Physical Education. **Two hours. I.**

Problems relating to the programming of equipment and facilities. Visits to and evaluation of surrounding facilities.

PHE 652. Motor Learning and Performance. **Three hours. II.**

Physiological and psychological factors relating to the learning of motor skills.

PHE 662. Adapted Physical Education. **Three hours. II.**

Basic principles of a good adapted program for handicapped students. A project will be required of each student.

PHE 669. Organization and Administration of Athletics. **Three hours. A.**

Administrative problems of high school and college athletics. Considers staff, program, budget, safety, insurance, facilities, and other phases of administration.

PHE 675. Seminar in Physical Education. **Three hours. II.**

Designed for research and discussion of critical questions in physical education. Issues to be selected will vary according to the concerns of seminar students.

PHE 680. Interpretation of Data in Physical Education. **Three hours. II.**

Statistical interpretation of physical education data. Written reports using statistics required.

PHE 691. Issues in Physical Education. Three hours. I.

Exploration of critical issues independently using resources and techniques appropriate for gathering supportive evidence and developing substantive positions. Written and oral presentations are required.

PHE 695. Advanced Testing and Evaluation in Health and Physical Education. Three hours. I.

Prerequisite: PHE 575, 680, or permission of the Instructor.

Comparative statistics, construction of measurement instruments, and evaluation techniques applied to health and physical education.

PHE 698. Research Design in Physical Education. Two hours. I.

Introduction to physical education research including examination of experimental research designs, laboratory methods, execution and reporting. Delimitation of research problems and presentation of thesis plans will be central to the course.

PHE 699. Specialist Project. Four hours. I, II.

Open only to Specialist Degree candidates.

Designed to guide the student in his development of a scholarly project—a field project, a creative study, or more formal types of research and inquiry.

RECREATION AND PARK ADMINISTRATION (REC)

James McChesney, Acting Chairman; Baechtold, Nieland.

This program is designed to develop competencies needed for administration, supervision, and leadership of recreation services. It focuses upon planning, conducting, and administering recreation programs in a variety of settings.

During the second or third year, students may elect any one of the optional emphases in which they have an interest. Most students who have an interest in recreation will concentrate on the Recreation Program emphasis. However, students who have special interests, needs, or strengths in a particular recreation setting may concentrate more fully in their preparation for employment by electing any of the following special emphases:

Recreation Programming, Camping and Outdoor Recreation,
Recreation and Park Administration, Therapeutic Recreation,
School-Community Recreation, Voluntary Youth Serving Agencies.

Curriculum for a major in Recreation and Park Administration (non-teaching). The first two years of this curriculum may be found in the Central University College Section.

Curriculum for a major in Recreation and Park Administration

REC 100, 102, 163, 201, 263, 302, 410, 463, 464, 501; 2 hours electives from REC 303, 305, 506, 511; POL 320; PSY 211; IED 326, SPE 100, 300; PHE 215 and 216, (women 207 and 208), 241, 300, 322, 400; (women 510), and HEA 202; and Electives (men) 14 hours; Electives (women) 18 hours.

Curriculum for a minor in Recreation and Park Administration

REC 100, 102, 201, 302, 410, 501; and 3 hours elective from PHE 215, 216, (207 and 208 women), 241, 300, 322, 400, (510 women); IED 326; DRA 545; REC 303.

Third Year

First Semester	Hours	Second Semester	Hours
PSY 211	3	POL 320	3
IED 326	3	PHE 322	2
PHE 300 or PHE 216 (men) or PHE 208 (women)	2	PHE 241	2
REC 302	2	SPE 100	3
ART 200, MUS 271 or elective	3	REC 303 or 305	2-3
REC 201 or elective	2	PHE 300 or elective	3
	15		15-16

Fourth Year

First Semester	Hours	Second Semester	Hours
SPE 300	3	REC 463	8
PHE 400 (men) or PHE 510 (women)	3	REC 464	1
REC 410	3	REC 466	2
REC 501	3	Electives	5-7
General Education Requirement or elective	3		
Elective	2		
	17		16-18

ASSOCIATE OF ARTS DEGREE IN RECREATION SUPERVISION (REC)

This terminal two-year Associate of Arts Degree in Recreation Supervision is designed to prepare students as recreation technicians and supervisors in a variety of recreation positions. If at the end of two years a student desires to continue his college education and is academically eligible, he may enter the four-year program.

ASSOCIATE OF ARTS DEGREE

Major in Recreation Supervision

Two Year Curriculum

First Year

First Semester	Hours	Second Semester	Hours
GSE 101	3	HEA 202	2
GSP 180	1	GSE 102	3
GSS 142 or POL 101	3	GSP 181	1
MIL 101 or elective	2	MIL 102 or elective	2
PHE 215 (men) or PHE 207 (women)	2	PHE 216 (men) or PHE 208 (women)	2
REC 100	2	REC 102	2
SPE 100	3	REC 163	1
		REC 201	3
	16		16

Second Year

First Semester	Hours	Second Semester	Hours
GSC 261, 262, or GLY 108	3	MIL 202 or elective	2
IED 326	3	PHE 300	2
PHE 322	2	PHE 241	2
REC 263	1	PSY 211	3
REC 302	2	REC 410	3
REC 303 or 305	2-3	Electives	4-5
MIL 201 or elective	2		
	15-16		16-17

RECREATION AND PARK ADMINISTRATION (REC)

REC 100. Introduction to Recreation. **Two hours.** I, II.

Designed to introduce beginning students to the recreation profession. Nature of recreation and the individual, influence of leisure, recreation philosophy, and employment possibilities.

REC 102. Recreation Leadership. **Two hours.** I, II.

Techniques of leadership in working with individuals and groups in various recreation settings. Guidance and supervision of paid and voluntary leadership.

REC 163. Field Training I. **One hour.** II.

Orientation of the recreation major to the profession through observation and practical experiences in a recreation setting.

REC 201. Camp Counseling. **Three hours.** I, II.

Leadership aspects of modern camps. Camp counseling and field experience in camp settings. Nature studies and techniques of conducting groups in outdoor settings. One weekend campout required.

REC 263. Field Training II. **One hour.** I.

Students are assigned to a recreation agency and required to plan, lead or direct various activities requiring recreation leadership skills.

REC 302. Social Recreation. **Two hours.** I, II.

Various techniques of organizing individuals and groups for social activities. Practical work is presented and required.

REC 303. Private and Voluntary Agency Recreation. **Three hours.** II.

Comprehensive study of recreation services and objectives. Visits to observe programs in action. Agency representatives lecture.

REC 305. Recreation for the Aging. **Two hours.** I.

Leisure problems of aging citizens, leadership, modification of program activities, trends and developments in geriatrics planning, use of community resources, club organization, facilities, and financing of operations.

REC 410. Community Centers and Recreation—Parks. **Three hours.** I, II.

Comprehensive study of facilities, equipment, leadership techniques, and programs at community centers and playgrounds.

REC 463. Professional Field Experiences. **Eight hours.** I, II.

Students serve twelve weeks in a recreation agency to observe and conduct activities. Through this training the student has the opportunity to test concepts developed in his regular class work and to develop competencies essential to successful professional recreation leadership.

REC 464. Advanced Leadership Techniques. **One hour.** I, II.

Review of the leadership techniques used during field experience. Students demonstrate and practice leadership techniques with groups and individuals.

REC 466. The Recreation Program. **Two hours.** I, II.

Comprehensive course in recreation program planning and development. Students plan a one-year program.

REC 501. Recreation and Park Administration. **Three hours.** I, II.

Community organization, administrative practices, legal aspects, recruiting, selecting leaders, personnel practice, and public relations.

REC 506. Planning, Design, and Maintenance of Recreation Facilities. Three hours. II.

Planning principles and procedures of recreation and park areas. Facilities, design problems, details of structure and equipment, master planning methods, study of standards and trends, and management of the custodial and maintenance program.

REC 511. Therapeutic Recreation. Three hours. I.

Prerequisite: Approval of the instructor.

Terminology and programming in a therapeutic setting. Modification of leadership techniques and activities adaptation for the ill and handicapped. Field trips to observe programs.

SCHOOL AND PUBLIC HEALTH (HEA)

Herman S. Bush, Chairman; Baugh, Copes, F. Francis, Harper, Harville, Hissom, Hood, Ison, King, J. Murray, Plummer, Ramsdell, Shannon.

Curriculum for a school health major. (Teaching).*

Required: HEA 202, 300, 315, 325, 375, 380, 424, 446, 464, 487, HEC 310 and BIO 378 (24 hours)

Electives: HEA 320, 365, PHE 320, 325, TRS 585, 586, BIO 273 (6 hours)

*Minor restricted to Physical Education or Biology

Curriculum for a minor in school health. (Teaching).

Required: HEA 202, 315, 375, 380, 487, HEC 310 (13 hours)

Electives: HEA 300, 320, 325, 365, 424, 446, 464, BIO 378 (8 hours)

Curriculum for a major in public health with a concentration in community health education or environmental sanitation. (Non-teaching).

Required: HEA 300, 315, 320, 375, 380, 365, or 487, 416, 446, 455, 456, 463; HEC 310, PSY 211, BIO 301, 378, and BIO 221 or its equivalent. (43-44 hours)

Suggested Electives: AGR 280, 390, 314, BIO 403, ENG 201, SPE 100, HEC 231, 307, PSY 312, 500, 504, SOC 360, 370, 395, HEA 325, 424. (Electives 3-19 hours depending on hours required for R.O.T.C. and elected minor).

The basic purpose of this undergraduate program is to prepare graduates as community health educators and environmental health specialists. Students wishing to specialize as community health educators are encouraged to take a minor in psychology or sociology. A minor in agriculture, biology, or chemistry is strongly recommended for students wishing to specialize in environmental health.

SCHOOL HEALTH

Third Year

First Semester	Hours	Second Semester	Hours
EDF 317	4	HEA 375	2
HEA 315	2	HEA 380	2
HEA 325	2	HEC 310	2
Electives: Minor	8	Electives: Minor	10
	16		16

Fourth Year

First Semester	Hours	Second Semester	Hours
HEA 424	2	ESH 498	4
HEA 446	2	ESH 499	10
HEA 464	2	ESH 466	3
HEA 487	3		
Electives: Restricted	6		
General education elective if needed	3		
	18		17

PUBLIC HEALTH

Third Year

First Semester	Hours	Second Semester	Hours
BIO 221 or minor requirements or electives	4	BIO 301	3
HEA 375	2	BIO 378	1
HEA 380	2	HEA 365 or 487	2-3
HEA 320	2	Health electives or minor requirements or electives	11
PSY 211	3		
Minor requirements or electives	4		
	17		17-18

Fourth Year

First Semester	Hours	Second Semester	Hours
HEA 416	2	HEA 456	2
HEA 446	2	HEA 455	2
Minor requirements or electives	12	HEA 463	10
	16		14

HEA 202. Safety and First Aid. **Two hours.** I, II.

Designed to prepare the student to meet emergencies in the school room, on the playground, on the athletic field, and in everyday life. The Standard Red Cross Certificate is awarded. Safety instruction is also included.

HEA 300. Introduction to Health Professions. **Two hours.** I, II.

Special emphasis placed on history of public and school health, principles and concepts of health, relationships among health, wellness, aging, infections and disease, health education role in the school, and attainment of a realistic philosophy of health.

HEA 315. Community Health Problems. **Two hours.** I, II.

Study of local, state, national, and international health problems with emphasis placed on the epidemiology and prevention of communicable and chronic diseases as well as insanitary factors in man's environment that are deleterious to his well-being.

HEA 320. Environmental Sanitation. **Two hours.** I.

The elements of environmental sanitation including the study of water and air pollution, food and milk sanitation, general sanitation problems, and principles involved in water and waste treatment plant operation.

HEA 325. Safety Education. **Two hours.** I, II.

Emphasizes the cost and trends of accidents in home, industry, traffic, farms, and during recreational activity. Considers personal activities and practices. The needs of students as they pertain to safety education will be covered.

HEA 365. Elementary School Health Education. **Two hours.** I.

Study of the characteristics and health needs of elementary students. Techniques providing worthwhile learning experiences in the various aspects of the health education curriculum are reviewed. A health education curriculum for grades 1-6 is developed.

HEA 375. Family Health Education. **Two hours.** I, II.

A study of the biophysical and psychosocial aspects of family living and the development of a wholesome attitude and value system towards sex and family living. Emphasis is placed on curriculum content and developing teaching competencies and instructional skills.

HEA 380. Mental Health Education. **Two hours.** I, II.

A study of basic needs for mental health educational programs. Emphasis on curriculum content and teaching aspects of mental health and a more thorough understanding by the teacher of mental health regarding student behavior.

HEA 410. Care and Prevention of Athletic Injuries. **Two hours.** I.

Problems of athletic injuries as they concern the coach. Discussion, demonstration, and practical experiences in the care and prevention of athletic injuries.

HEA 416. Administration of Public Health. **Two hours.** II.

Prerequisite: HEA 315

Planning and organizing the public health program, selection of personnel and materials, directing and evaluating public health services at county, state, and federal levels. Ways of influencing public opinion and behavior, and organization of health councils considered.

HEA 424. Healthful School Environment. **Two hours.** II.

A study of the environmental health and safety aspects of a school. Students will develop a comprehensive evaluation criteria for the evaluation of school facilities and grounds. A handbook of school safety regulations will also be prepared.

HEA 446. School Health Screening Services. **Two hours.** II.

A study of the need for school health screening services. Students will develop ability to screen students in the following areas: height, weight, posture, vision, hearing, and nutrition. Students will develop a proposal for a comprehensive school health services program.

HEA 455. Epidemiology. **Two hours.** II.

Prerequisite: Biology 221 (Microbiology)

Study of the factors that affect the occurrence and course of disease in a population. Emphasis would be focused on the preventive methods of epidemiology by study of the causative agents, susceptible host, favorable environments, and the effective use of epidemiological methods.

HEA 456. Public Health Laws. **Two hours.** II.

Legal foundation for public health programs; including a comprehensive study and interpretation of state and local health laws and ordinances and the enforcement of the regulations.

HEA 463. Field Training in Public Health. **Ten hours.** II.

This course is offered, cooperatively with the Kentucky State Health Department, to graduating seniors and will consist of actual field experience and training in local and state public health work.

HEA 464. Administration of School Health. **Two hours.** I.

Study of the organization of the school health program. Principles of supervision and administration in school health will be studied.

HEA 487. Secondary School Health Education. **Three hours.** I, II.

Study of the characteristics and health needs of secondary students. A health education curriculum for grades 7-12 is developed.

HEA 588. School Health Services. **Three hours.** A.

Study of school health services, and the relationship to the total health and school program. Detailed study in theory, evaluation techniques, and follow-up procedures in the health screening program.

HEA 597. Health Instruction. **Three hours.** A.

Consideration of health problems, and health materials, and development of a curriculum guide for health instruction in grades 1-12.

Graduate School

GRADUATE SCHOOL

E. E. Moretz, Dean

DEGREES, PROGRAMS, AND REQUIREMENTS

The Graduate School, in cooperation with the College of Applied Arts and Technology, the College of Arts and Sciences, the College of Business, and the College of Education, offers the following degree programs:

College of Arts and Sciences
- Master of Arts Degree
  - English
  - History
  - Geography
  - Political Science
- Master of Music Education Degree
- Master of Public Administration Degree
- Master of Science Degree
  - Biology
  - Chemistry
  - Clinical Psychology
  - Geology
  - Physics
  - School Psychology

College of Applied Arts and Technology
- Master of Science Degree
  - Criminal Justice
  - Industrial Education
  - Industrial Technology
- Specialist Degree in Technology

College of Business
- Master of Business Administration Degree

College of Education
- Master of Arts in Education Degree
  - Elementary Education
  - Elementary Education—Reading
  - Guidance and Counseling
  - Library Science
  - Secondary Education—Reading
  - Art
  - Biology
  - Business Education
  - Chemistry
  - Earth Science
  - English
  - French
  - Geography
  - History

        Home Economics
        Industrial Education
        Library Science
        Mathematics
        Music
        Physics
        Physical Education
        Political Science
        School Social Work
        Spanish
        Special Education
    Master of Arts Degree
        Guidance—Non School
        Guidance—Student Personnel
    Master of Science Degree
        Physical Education
    Specialist in Education
        Elementary Education
        Guidance and Counseling
        Guidance—Student Personnel
        Physical Education
    Fifth and Sixth Year Certification Programs for Teachers and School Service Personnel
    The Joint Doctoral Program in Education
        (Ed.D. and Ph.D. programs are offered cooperatively with the University of Kentucky).

TYPES OF ADMISSION

Students may gain admission to graduate study at Eastern Kentucky University as degree or as non-degree graduate students.

Students seeking to matriculate with degree status may be admitted with or without special conditions, depending upon the extent to which aptitude for graduate study and program prerequisites are satisfactory. The student should refer to the *Graduate Catalog* for more complete program requirements and details.

GENERAL ADMISSION REQUIREMENTS

1. A graduate of an accredited 4 year institution eligible to grant the baccalaureate degree.
2. Except when specified otherwise in the admission requirements of programs, an over-all undergraduate point standing of at least 2.4 (based on a 4.0). A limited number of students may be admitted in exception to this requirement when other evidence indicates a capacity for graduate study which the undegraduate record does not reveal.
3. Complete data filed by the student in the Office of the Graduate School, including two copies of the transcript of all college credits, both graduate and undergraduate. Failure to submit transcripts for any part of previous work may lead to disciplinary action.

UNDERGRADUATE ADMISSION

An undergraduate student who needs not more than nine semester hours in one semester (or three semester hours in one summer session) to complete all of the requirements for a bachelor's degree may be allowed to register for graduate credit work under the conditions described below.

All work for undergraduate credit will be completed during that semester or summer session.

The total registration for all work will not exceed twelve semester hours in a semester (or six semester hours in a summer session).

All work to be counted for graduate credit will be approved in advance by his college dean and advisor and by the Dean of the Graduate School.

The student must meet all pertinent conditions for admission to the Graduate School, and credits must not be used to meet undergraduate requirements.

GRADUATE RECORD EXAMINATION

All graduate students must submit, either at the time of application for admission or no later than the completion of the first session of graduate work, the scores of the aptitude sections of the Graduate Record Examination. Certain programs require Advanced Graduate Record Examinations in the subject field in addition to the aptitude sections. The Graduate Record Examinations are administered at Eastern in October, April, and July. Application to take the Graduate Record Examination must be received in the office of the Educational Testing Service, Princeton, New Jersey, more than three weeks in advance of the testing date. Application forms are available in the office of the Dean of the Graduate School. It is the student's responsibility to apply for, to take the examination, and to have the scores sent to the Dean of the Graduate School at Eastern.

RESIDENCE REQUIREMENTS FOR DEGREES

The minimum residence requirement shall be two semesters. At least one-half of the course requirements and one-half of the residence work shall be met as a full-time graduate student. A load of six semester hours of credit shall be regarded as full-time during an eight week summer term and a minimum load of nine hours of credit shall be regarded as full-time during one semester.

GRADE POINT AVERAGE

Candidates for a master's degree must have an average standing of at least 3.00 on a 4.00 scale. No credit shall be granted for a grade below C.

ADMISSION TO CANDIDACY

1. A graduate student must be admitted to candidacy by the Graduate Council before he is eligible for the master's degree. At least 9 hours of graduate credit must be earned before admission to candidacy and at least 12 hours must be earned after admission to candidacy.
2. More detailed requirements for admission to candidacy are specified in the outlines of the degree programs listed in this *Catalog* and the *Graduate Catalog.*

Richmond Community College

RICHMOND COMMUNITY COLLEGE

Kenneth Clawson, Dean

GENERAL INFORMATION

RICHMOND COMMUNITY COLLEGE has been established as a major division within Eastern Kentucky University in recognition of the growing importance of trained people with specific skills and education requiring less than four years. Within the next decade, approximately fifty percent of the work force will be in technical, semi-professional, and service oriented jobs. *Preparation for many of these jobs will require the skills and education of at least two years of college (Associate Degree).* Young people and adults who wish to take advantage of these job opportunities are now enrolling in college programs such as those provided by Eastern Kentucky University.

RICHMOND COMMUNITY COLLEGE might be referred to as Eastern Kentucky University's "opportunity college," for one purpose is to extend educational opportunities to students. It assures one of high quality education at reasonable costs in order to help one attain the knowledge and skills needed for more productive and rewarding employment in a minimum of time.

Included among the services and educational opportunities offered by RICHMOND COMMUNITY COLLEGE are:

- *Information* about all one and two-year programs offered by Eastern Kentucky University.
- *Guidance* for students or prospective students in selecting a program of study.
- *Community services* in cooperation with the Office of Continuing Education and the various Colleges of the University.
- *Clearinghouse* for information on new or proposed programs.
- *Short courses, institutes, seminars* and other *programs for adults* (In cooperation with the Division of Continuing Education and other Colleges of the University).

In cooperation with the respective Colleges of Eastern Kentucky University, the following programs of study are offered. Additional programs are being considered and may be available when a student is ready to enter college.

PROGRAMS OF STUDY

Page

College of Applied Arts and Technology 112

Department of Agriculture

- **Agriculture Mechanization (AA)** 115
- **Dairy Science and Technology (AA)** 115
- **Ornamental Horticulture (AA)** 116

Department of Home Economics

- **Child Care (AA)** 126
- **Food Service Technology (AA)** 126
- **Homemaking Supervision (AA)** 127

Department of Industrial Education
— **Vocational-Industrial and Technical Teacher Education (AA)** 136
Department of Industrial Technology
— **Applied Electronics Technology (AA)** 149
— **Broadcast Engineering Technology (AA)** 147
— **Drafting and Design Technology (AA)** 148
— **Drafting Technology (AA)** 148
— **Electronics Technology (AA)** 149
— **Instructional Media Technology (AA)** 150
— **Printing Technology (AA)** 150
School of Law Enforcement
— **Corrections (AA)** 162
— **General Law Enforcement (AA)** 161
— **Industrial Security (AA)** 161
— **Juvenile (AA)** 162
Department of Nursing
— **Nursing (AA) (RN)** 165
— **Medical Record Technology** 166
Kentucky School of Crafts
— **Vocational Crafts (AA)** 153
College of Business 274
Department of Business Education and Office Management
— **Executive Secretarial Program (AA)** 289
College of Education 298
Division of Health, Physical Education and Recreation
— **Recreation Supervision (AA)** 330

PURPOSE AND CHARACTERISTICS OF CURRICULA

The main purpose of Eastern Kentucky University's one and two-year programs is to provide high quality instruction in a variety of technical, business, semi-professional, and service oriented professions. In general, these programs have the following characteristics:

— **minimum amount of time** is needed for completion of a program (two years is normally required to complete an Associate of Arts Degree).
— **programs of study are specialized,** emphasizing specific skills and knowledge needed for particular jobs.
— many **programs may be pursued on a part-time basis.**
— **job opportunities** for graduates abound at very attractive and rewarding salaries. Many more can be placed than are graduated from each program.
— **graduates** of Associate Degree programs **may continue their education** toward a baccalaureate or higher degree.
— programs of study combine academic training with laboratory experiences, observations, and "on-the-job" experience.
— programs of study and job opportunities are available to all—men and women, young and old, rich and poor.

- departments maintain close contact and seek the support and advice of business, industry, and potential employers in each specialized area.
- in addition to university-wide loans, scholarships, work-study grants, etc., additional or **special loans and scholarships are available** for students in specific associate degree programs.

HIGHLIGHTS

Some of the outstanding features of the RICHMOND COMMUNITY COLLEGE programs are:

- Classes and laboratories are taught by outstanding faculty who combine the best professional training with practical experience. The same faculty teach students in associate degree programs that teach students in other college programs. All hold the doctorate or other advanced degrees in their fields of specialization.
- The university provides a library, shops, laboratories, and other specialized facilities with the latest equipment for use in instruction.
- Outside resource people are brought to the university to lecture and demonstrate the latest equipment, methods, and techniques.
- Graduates with an Associate of Arts Degree are better equipped as citizens, for community leadership and service to others, to earn a living, and to enjoy a life of productive work.

EKU

Continuing Education

Correspondence . 344
Extension . 345

DIVISION OF CONTINUING EDUCATION

LaRue Cocanougher, Dean

Institutions of higher education can no longer meet their full responsibilities by offering only the services provided by the traditional campus programs. Many people who desire additional educational opportunities find it impossible, or at least impractical, to participate in the regular university program.

In this age of rapid change in all areas of education, it has become essential that practitioners must either keep informed of the knowledge which is constantly being expanded or become less effective in their jobs. There are also many people who have not reached the desired level of education for the vocation in which they are now engaged. In addition, increased leisure time for some groups offers opportunities for explorations of educational activities purely from an interest standpoint.

Eastern Kentucky University's Division of Continuing Education attempts to meet their needs through extension classes, correspondence study, and Saturday and evening classes. Consultative service by staff and faculty, institutes, workshops, conferences, and other short term course offerings are also available.

CORRESPONDENCE STUDY DEPARTMENT

Eastern Kentucky University, through its Division of Continuing Education, offers a number of regular college and high school correspondence courses as a means of study open to anyone who desires to continue their education in this manner. These courses may be taken on either a credit or non-credit basis.

Correspondence courses cover essentially the same material as the same or similar courses offered on campus. Students prepare assignments and submit them, along with any questions they may have, to their instructor through the Continuing Education Office. The instructor then evaluates the work and returns the evaluation form with his comments. This type of instruction offers an opportunity for the student to be taught on an individual basis. In essence, he has a tutorial type of arrangement which defies distance.

Both high school and college courses are offered by correspondence. The college courses may be applied toward a bachelor's degree from Eastern Kentucky University or other institutions of higher education. These courses, with some exceptions, may also be used by teachers who desire to meet certification requirements. The high school courses may be applied toward a high school diploma. Correspondence courses may also be taken on a non-credit basis for other goals such as studying for professional advancement, exploring new interests, or learning new skills.

Fees and Enrollment Procedures

A. Instructional fees, which do not include costs of textbooks and other reference materials, are governed by the following regulations:

1. All fees are payable in advance and are subject to change without notice to the student.
2. Instructional fees for college courses are based upon the number of semester hours of credit given for the course. The fee, at present, is $12.00 per semester hour. For a two-semester hour course the fee is $24.00 for a three-semester hour course the fee is $36.00.
3. The instructional fee for high school courses is $20.00 for each one-half unit.

B. Registration for a correspondence course includes the following procedures:

1. Applicants are required to make a separate application for each course on registration forms furnished by the institution.
2. College students are to use the four x six perforated **pink** registration card and high school students are to use the four x six **white** registration card.
3. The registration form must be **completed in full** by using ink or typewriter. The applicant should check to make sure that the same information is given on the form for the Office of Continuing Education and the form for the Registrar's Office.
4. **Send Both** completed registration forms together with the instruction fee to the Office of Continuing Education, Eastern Kentucky University, Richmond, Kentucky 40475. **Do Not Send Forms To The Registrar.**
5. Do not fold or bend the registration card except where perforated.
6. Additional registration forms can be obtained by writing to the Office of Continuing Education. Please state whether you desire to enroll for college or high school courses. The **Continuing Education Bulletin** which contains a listing of correspondence courses offered and regulations pertaining thereto, will also be sent upon request.

EXTENSION DEPARTMENT

Purposes and Objectives

Eastern Kentucky University strongly holds to the philosophy that there should be a close relationship with the homes, schools, industry, and various community groups of the state to the end that any citizen may feel free to call upon the University for any assistance which the institution may be able to render. The off-campus educational program of Eastern is designed to serve students who are unable to enroll in residence or who find it more helpful to work in local groups on certain common problems. More specifically, off-campus educational programs are designed to accomplish one or more of the following purposes:

1. To provide greater opportunities for those who want to increase their knowledge while regularly employed or improve their efficiency and skills either on credit or non-credit basis.

2. To encourage communities to make effective use of the resources of the University.
3. To assist in acquainting the faculty of the various departments with the educational programs and needs facing the communities served by the University.

Request for Off-Campus Courses

Anyone who desires to do so may request an off-campus course if, in his opinion, there will be sufficient interest to justify offering the course. If a course is desired, please contact the Office of Continuing Education, Eastern Kentucky University, in order that procedures may be worked out for getting the course organized.

General Requirements

Students will be admitted to off-campus credit courses who satisfy all prerequisites for these courses in exactly the same manner as is required of residence students.

Students may be permitted to audit an off-campus course without credit by paying the minimum fee required.

A minimum of 40 student-teacher contact hours involving a minimum of 12 calendar days are required for a three-semester hour course. For a two-semester hour course there must be at least 27 student-teacher contact hours within a minimum time of 8 calendar days.

The minimum charge for graduate and undergraduate work shall be $3.00 per hour more than the fee for part-time resident students.

Courses and Credit Limitations

Off-campus credit courses offered by Eastern are of various types. To a large extent, the nature of off-campus courses is determined by the needs of the local community. All courses offered are approved by the vice-president for academic affairs and the dean of the college in which the course is listed. Courses requiring laboratories or extended library service are not offered off campus.

A teacher employed on a full-time basis shall not be allowed to receive credit through off-campus courses and/or correspondence for more than a maximum of four semester hours each semester or eight semester hours during the regular school year of nine months.

Undergraduate students may apply a maximum of 32 semester hours by extension and/or correspondence toward a degree or certification.

Graduate students may apply a maximum of twelve semester hours of extension work toward an M.A. degree, fourteen hours toward completion of fifth year program, and fifteen hours toward completion of sixth year program.

ADDITIONAL CONTINUING EDUCATION SERVICES

For information pertaining to Saturday and evening schedules, institutes, workshops, conferences, and consultative services by faculty and staff, please write the Office of Continuing Education, Eastern Kentucky University, Richmond, Kentucky 40475 or call 622-2001.

70/71 CATALOG

Official Directory

……

Board of Regents . 349

Administration . 351

Faculty . 352

Administrative Staff . 403

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ARTHUR E. CURTIS, B.A., M.A. **Assistant Professor of Social Science**

B.A., Swarthmore College; M.A., Cornell University; additional graduate work, University of Oregon. At Eastern since 1967.

NANCY S. DANIEL, B.S., M.A. **Instructor of Elementary Education Supervising Teacher, Laboratory School**

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FRED DARLING, B.S., M.A., M.A. in Ed., Dir.R., Dir.P.E., Re.D. **Chairman, Department of Men's Physical Education; Professor of Health, Physical Education and Recreation**

B.S., M.A., Eastern Kentucky State College; M.A. in Ed., University of Kentucky; Dir.R., Dir.P.E., Re.D., Indiana University. At Eastern since 1946.

HAYWARD DAUGHERTY, B.S. **Admissions Counselor**

B.S., Eastern Kentucky University. At Eastern since 1970.

JOHN EDWIN DAVIDSON, B.S., M.S., Ph.D. **Associate Professor of Chemistry**

B.S. in Chem., M.S., Ph.D., University of Tennessee. At Eastern since 1965.

J. HOMER DAVIS, B.S., M.Ed. **Associate Professor of Industrial Education**

B.S., Eastern Kentucky State College; M.Ed., University of Missouri; additional graduate work, University of Kentucky; Penn State University; University of Cincinnati. At Eastern since 1949.

FRANCIS X. DAVY, A.B., M.A., Ph.D. **Professor of English**

A.B., Saint Mary's College; M.A., University of California; Ph.D., Columbia University. At Eastern since 1967.

DANIEL R. DEANE, JR., A.B., B.A. **Assistant Professor of Art Education**

A.B., M.A., University of Kentucky; additional graduate work, Eastern Kentucky State College, University of Kentucky, Northern Illinois University. At Eastern since 1962.

SHIRLEY P. DEANE, B.A., M.S. in L.S. **Assistant Professor of Library Science**

B.A., M.S. in L.S., University of Kentucky; additional graduate work, University of Kentucky and Northern Illinois University. At Eastern since 1970.

JOHN M. DECK, B.S., M.S., P.E.Dir., P.E.D. **Chairman, General Studies Physical Education**
Professor of Health and Physical Education

B.S., Central Methodist College; M.S., P.E.Dir., P.E.D., Indiana University. At Eastern since 1964.

JAMES WHEELER DEESE, B.A., J.D. **Assistant Professor of Law Enforcement**

B.A., J.D., University of Mississippi; additional graduate work, University of Mississippi. At Eastern since 1967.

WIETSE DE HOOP, B.A., M.S., M.A., Ed.D. **Chairman, Department of Special Education and Rehabilitation,**
Professor of Special Education

B.A., University of Florida; M.S., Florida State University; M.A., George Peabody College; Ed.D., University of Georgia. At Eastern since 1969.

CHARLOTTE DENNY, R.N., B.S., M.A. **Chairman, Dept. of Nursing**
Associate Professor of Nursing

Diploma, Central Islip State Hospital School of Nursing; B.S., New York University, M.A., University of Kentucky; additional graduate work, City College of New York and University of Kentucky. At Eastern since 1967.

JUDITH H. DETTRE, B.S.Ed., M.A.Ed., Ed.D. **Assistant Professor of Elementary Education**

B.S.Ed., M.A.Ed., Ohio State University; Ed.D., University of New Mexico. At Eastern since 1969.

ARCHIE L. DEVORE, B.S., M.S. **Assistant Professor of Agriculture**

B.S., University of Illinois; M.S., Purdue University; additional graduate work, University of Illinois. At Eastern since 1970.

DONALD L. DEWEY, A.B., M.F.A. **Instructor of Art**

A.B., M.F.A., Indiana University. At Eastern since 1970.

WALLACE C. DIXON, A.B., A.M., Ph.D. **Chairman, General Studies Science Program**
Professor of Biological Science

A.B., Eastern Nazarene College; A.M., Ph.D., Boston University; additional graduate work, Harvard University and Institute in the History of Science at the University of Tennessee. At Eastern since 1968.

LOLA T. DOANE, A.B., M.A., Ph.D. **Assistant Professor of Educational Psychology and Guidance**

A.B., M.A., Morehead State University; Ph.D., University of Mississippi. At Eastern since 1970.

NEAL DONALDSON, B.S., M.A. **Vice President of Business Affairs**

B.S., M.A., University of Kentucky. At Eastern since 1965.

RANDOLPH DOZIER, A.B., M.A. **Assistant Professor of Art and Education**

A.B., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky. At Eastern since 1959.

MICHAEL J. DUSZAK, M.A., Ph.D. **Professor of History**

M.A., Jagellonian University, Poland; Ph.D., University of Paris, Sorbonne, Paris, France. At Eastern since 1965.

JACK L. DYER, B.S., M.B.A. **Associate Professor of Accounting**

B.S., M.B.A., Indiana State University. At Eastern since 1967.

EDGAR A. EARNHART, B.S., M.A.T., M.A. **Assistant Professor of Social Science**

B.S., Northwestern University; M.A.T., Harvard University; M.A., New York University; Additional graduate work, New York University. At Eastern since 1970.

CONSTANCE M. ECKLAR, B.S., M.Ed. **Instructor of Mathematics**

B.S., University of Dayton; M.Ed., Miami University. At Eastern since 1968.

KENNETH C. EDWARDS, B.A., M.A. **Assistant Professor of Philosophy**

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HOWARD L. ELDOT, B.Ed., M.S., Ph.D. **Associate Professor of Special Education**

B.Ed., University of Miami; M.S., Syracuse University; Ph.D., Indiana University. At Eastern since 1970.

WILLIAM E. ELLIS, A.B., M.A. **Instructor of Social Science**

A.B., Georgetown College; M.A., Eastern Kentucky University; additional graduate work at University of Kentucky. At Eastern since 1970.

FRED A. ENGLE, JR., B.S., M.B.A. Ed.D. **Associate Professor of Economics**

B.S., Eastern Kentucky State College; M.B.A., Ed.D., University of Kentucky. At Eastern since 1959.

HENRY EVERMAN, A.B., M.A. **Assistant Professor of Social Science**

A.B., University of Kentucky; M.A., Louisiana State University; additional graduate work at Louisiana State University. At Eastern since 1970.

JERRY S. FAUGHN, B.S., M.S., Ph.D. **Associate Professor of Physics**

B.S., Murray State University; M.S., University of Kentucky; Ph.D., University of Mississippi. At Eastern since 1968.

RICHARD J. FEDOROWICZ, B.A., M.A. **Instructor of Art**

B.A., Michigan State University; M.A., University of Michigan. At Eastern since 1968.

DONALD R. FELTNER, B.S., M.A. **Vice President for Public Affairs Assistant Professor of Journalism**

B.S., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky. At Eastern since 1956.

CACUS P. FLESHER, B.S., M.A. **Assistant Professor of Educational Foundations**

B.S., Eastern Kentucky University; M.A., University of Kentucky; additional graduate work, George Peabody College and University of Kentucky. At Eastern since 1962.

NANCY KIRKHAM FORDERHASE, A.B., M.A. **Assistant Professor of History**

A.B., State University of South Dakota; M.A., University of Missouri; additional graduate work at University of Missouri. At Eastern since 1966.

RUDOLPH EUGENE FORDERHASE, A.B., A.M., Ph.D. **Associate Professor of History**

A.B., A.M., Ph.D., University of Missouri. At Eastern since 1966.

ADRIANNA H. FRANCIS, B.S., M.A. **Assistant Professor of Elementary Education**

B.S., Pikeville College; M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky and Eastern Kentucky State College. At Eastern since 1963.

FRED L. FRANCIS, B.S., M.A. **Instructor of Health and Physical Education Assistant Football Coach and Wrestling Coach**

B.S., Morehead State University; M.A., Murray State University. At Eastern since 1967.

FREDA C. FRANCIS, B.S., M.A. **Instructor of Home Economics**

B.S., Morehead State College; M.A., Eastern Kentucky University. At Eastern since 1970.

SARAH EVELYN FRANCIS, B.S., M.A., Ed.D. **Professor of Elementary Education**

B.S., M.A., East Tennessee State University; Ed.D., Indiana University. At Eastern since 1966.

DAISY B. FRENCH, B.S., M.A., Ph.D. **Associate Professor of Accounting**

B.S., M.A., Eastern Kentucky State College; Ph.D., University of Kentucky. At Eastern since 1956.

RALPH E. FRETTY, A.B., A.M., M.A., M.A.L.D. **Assistant Professor, Political Science**

A.B., University of Iowa; A.M., Drake University; M.A., M.A.L.D., additional graduate work, The Fletcher School of Law and Diplomacy. At Eastern since 1969.

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B.S., M.A., Eastern Kentucky University. At Eastern since 1967.

***RUDOLPH S. FULTON, B.S., M.S.** **Instructor of Biology**

B.S., East Central State College; M.S., University of Mississippi. At Eastern since 1967.

***On leave 1970-71.**

DONALD L. GATES, B.S., M.S. **Assistant Professor of Home Economics**

B.S., M.S., Southern Illinois University. At Eastern since 1970.

DWIGHT DEAN GATWOOD, A.A., B.S., M.A. **Associate Professor of Art Education**

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B.S., M.S., University of Missouri. At Eastern since 1969.

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B.S., Arkansas A&M College; M.A., Eastern Kentucky University. At Eastern since 1970.

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VENU GUPTA, B.A. Hons., M.A., B.Ed., M.Ed. **Assistant Professor of Educational Psychology**

B.A. Hons., Punjab University; M.A., University of Delhi; B.Ed., Central Institute of Education; M.Ed., Punjab University; additional graduate work, Alberta University. At Eastern since 1968.

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A.B., Goucher College; M.A., Emory University, additional graduate work at Emory University. At Eastern since 1967.

OBERITA HAGER, A.B., M.A., Ph.D. **Associate Professor of Business Education and Office Administration**

A.B., M.A., Marshall University; Ph.D., Ohio State University. At Eastern since 1967.

EDWARD C. HALE, B.A., M.F.A. **Assistant Professor of Art**

B.A., University of Kentucky; M.F.A., Maryland Institute of Art. At Eastern since 1969.

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DONALD C. HANEY, B.S., M.S., Ph.D. **Chairman, Department of Geology**
Professor of Geology

B.S., M.S., University of Kentucky; Ph.D., University of Tennessee. At Eastern since 1962.

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B.S., M.S., additional graduate work, University of Wisconsin. At Eastern since 1969.

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B.S., Southern Illinois University; M.Ed., Ph.D., University of Missouri. At Eastern since 1966.

DOROTHY W. HARKINS, B.S., M.S., Ed.D. **Assistant Professor of Physical Education**

B.S., Murray State University; M.S., Southern Illinois University; Ed.D., University of Kentucky. At Eastern since 1968.

JOHN P. HARLEY, B.A., M.A., Ph.D. **Assistant Professor of Biology**

B.A., Youngstown State University; M.A., Ph.D., Kent State University. At Eastern since 1970.

TOM HARPER, B.S., M.A. **Instructor of Health and Physical Education**
Assistant Basketball Coach

B.S., M.A., University of Kentucky. At Eastern since 1969.

JAMES S. HARRIS, A.B., M.A. Director of Instructional Services and Associate Professor of Education

A.B., Unversity of Kentucky; MA.., University of Missouri; additional graduate work at Louisiana State University and University of Missouri. At Eastern since 1965.

SUSAN B. HARRIS, B.S., M.A. Assistant Professor of Special Education

B.S., Murray State College; M.A., University of Missouri; additional graduate work, Eastern Kentucky. At Eastern since 1965.

PHILLIP H. HARRIS, B.A., M.A. Assistant Professor of Art

B.A., M.A., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1964.

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B.A., University of Richmond; B.D., Southern Baptist Theological Seminary; M.A., Emory University; Ph.D., Temple University. At Eastern since 1970.

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B.S., M.A., Eastern Kentucky University. At Eastern since 1969.

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B.S., St. Peter's College; Ph.D., University of South Carolina. At Eastern since 1970.

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B.Mus.Ed., Capital University; M.A., Ohio State University; additional graduate work, Ohio State University. At Eastern since 1967.

ROBERT H. HARVILLE, B.S., M.A. Assistant Professor of Health and Physical Education; Assistant Football Coach

B.S., M.A., Eastern Kentucky State College; additional graduate work at Eastern Kentucky State College. At Eastern since 1965.

ALDEN O. HATCH, B.S. Director of Housing

B.S., University of Utah. At Eastern since 1965.

BETTY K. HATFIELD, A.B., M.S.L.S. Assistant Professor of Library Science

A.B., M.S.inL.S., University of Kentucky. At Eastern since 1963.

GLENN W. HAYES, B.S., M.Ed., Ed.D. Associate Professor of Agriculture

B.S., M.Ed., Ed.D., University of Illinois. At Eastern since 1966.

ROBERT HAYES, B.A., M.A., Ed.D. Chairman, Dept. of Educational Psychology and Guidance
Associate Professor of Educational Psychology and Guidance

B.A., Berea College; M.A., Eastern Kentucky University; Ed.D., University of Alabama. At Eastern since 1964.

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B.Mus., M.Mus., University of Illinois; D.M.A., University of Missouri-Kansas City. At Eastern since 1959.

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B.S., M.A., Eastern Kentucky State College; additional graduate work, Indiana University. At Eastern since 1961.

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B.A., Augustana College; M.A., Auburn University; Ph.D., University of Illinois. At Eastern since 1966.

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Professor of Home Economics

B.S., Pennsylvania State University; M.S., University of Wisconsin, Ph.D., Michigan State University; post-doctoral work at University of Illinois and the University of Paris. At Eastern since 1968.

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A.B., M.A., Eastern Kentucky State College; Ed.S., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1960.

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B.A., McMurray, M.S., and Ph.D., Florida State University. At Eastern since 1968.

JACK R. HISSOM, B.S., M.A. — **Assistant Professor of Health and Physical Education, Assistant Basketball Coach**

B.S., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky, Ohio University. At Eastern since 1967.

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Diploma, Good Samaritan Hospital School of Nursing; B.S., Milligan College. At Eastern since 1970.

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B.S., Middle Tennessee State University; M.F.A., Southern Illinois University. At Eastern since 1969.

BRUCE D. HOAGLAND, B.S., M.S., D.M.A. — **Associate Professor of Music and Education**

B.S., Indiana State University; M.S., University of Illinois; D.M.A., University of Missouri-Kansas City. At Eastern since 1967.

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B.S., Berea College; M.A., Eastern Kentucky State College; Ed.D., University of Tennessee. At Eastern since 1960.

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A.A., B.S., Eastern Kentucky University. At Eastern since 1968.

HAROLD Z. HOLMES, JR., B.S., M.S., Ph.D. — **Assistant Professor of Physical Education**

B.S., M.S., Ph.D., University of Illinois. At Eastern since 1969.

R. KAY H. HOPKINS, A.B., M.A. — **Instructor of English**

A.B., M.A., University of Kentucky. At Eastern since 1967.

GERTRUDE M. HOOD, A.B., A.M. — **Associate Professor of Health**

A.B., Ohio Wesleyan University; A.M., Columbia University. At Eastern since 1928.

WILLIAM A. HOUSEHOLDER, B.S., M.S., Ph.D. — **Chairman, Department of Agriculture Professor of Agriculture**

B.S., Colorado State University; M.S., Cornell University; Ph.D., Michigan State University. At Eastern since 1965.

WILBUR RUSSELL HOUSTON, M.D. — **Director, Student Health Services Campus Physician**

M.D., Eclectic Medical College. At Eastern since 1966.

AUGHTUM S. HOWARD, A.B., M.S., Ph.D. — **Professor of Mathematics**

A.B., Georgetown College; M.S., Ph.D., University of Kentucky. At Eastern since 1958.

JOSEPH M. HOWARD, B.S., A.M., Ed.D. **Professor of Elementary Education**

B.S., Western Kentucky State College; A.M., George Peabody College; Ed.D., Teachers College, Columbia University. At Eastern since 1962.

CHARLES T. HUGHES, A.B., M.A. **Professor of Health and Physical Education Baseball Coach**

Diploma, Morton-Elliott Junior College; A.B., University of Kentucky; M.A., University of Michigan. At Eastern since 1929.

BONNIE B. HUME, B.S., M.A., Ph.D. **Associate Professor of Educational Foundations**

B.S., Eastern Kentucky University; M.A., Ph.D., University of Kentucky. At Eastern since 1968.

ROBERT L. HUNGARLAND, B.S., M.B.A. **Associate Professor of Business**

B.S., Oklahoma City University; M.B.A., Southern Methodist University; additional graduate work, Arizona State University. At Eastern since 1964.

GRAHAM H. HUNT, B.S., M.S., Ph.D. **Professor of Geology**

B.S., University of Manitoba; M.S., Ph.D., University of Alberta. At Eastern since 1967.

***CARL E. HURLEY, B.S., M.A.** **Instructor of Industrial Arts Supervising Teacher Laboratory School**

B.S., M.A., Eastern Kentucky University; additional graduate work, Eastern Kentucky University, University of Missouri. At Eastern since 1966.

JACK T. HUTCHINSON, B.S., M.A. **Assistant Professor Director, Men's Residence Centers**

B.S., Pikeville College; M.A., Eastern Kentucky University. At Eastern since 1969.

MARY K. INGELS, A.B., M.A. **Dean of Women Assistant Professor of Foreign Languages**

A.B., M.A., Eastern Kentucky State College; study tour, Ohio University; graduate study, Appalachian State Teachers College, Boone, North Carolina; L'Universite' de Besancon, France. At Eastern since 1961.

JACK D. ISON, B.S., M.A. **Assistant Professor of Health and Physical Education, Assistant Football Coach**

B.S., M.A., Eastern Kentucky State College; additional graduate work, Indiana University. At Eastern since 1967.

JUDITH ISAACS, B.A., M.S. **Instructor of Art Supervising Teacher, Laboratory School**

B.A., Valparaiso University; M.S., Indiana University; additional graduate work, Ohio University. At Eastern since 1969.

RONALD B. ISAACS, B.A., M.F.A. **Assistant Professor of Art**

B.A., Berea College; M.F.A., Indiana University. At Eastern since 1969.

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*On leave 1970-71.

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B.S., Murray State College; C.P.A., Kentucky. At Eastern since 1969.

ELIZABETH L. JEFFRIES, B.S., M.A. **Assistant Professor of Elementary Education**

B.S., University of Tennessee; M.A., East Tennessee State University. At Eastern since 1967.

MABEL W. JENNINGS, B.S., M.A., Ed.S. **Professor of Elementary Education**

B.S., M.A., Eastern Kentucky State College; Ed.S., University of Kentucky; additional graduate work, University of Chicago, University of Kentucky. At Eastern since 1947.

MYRENA S. JENNINGS, B.S., M.A. **Instructor of Business Education and Office Administration**

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B.S.Ed., Bowling Green State University; M.A., Eastern Kentucky State College; additional graduate work, Springfield College, University of Colorado, West Virginia University, Ball State University, University of Illinois and Long Beach State College. At Eastern since 1963.

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Supervising Teacher, Laboratory School

A.B., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky, Eastern Kentucky State College. At Eastern since 1962.

THOMAS L. KEEFE, B.S., M.S., Ph.D. Assistant Professor of Biology

B.S., M.S., University of South Carolina; Ph.D., University of Georgia. At Eastern since 1966.

QUENTIN B. KEEN, B.A., M.A., M.A.Ed., Ph.D. Professor of History

B.A., Berea College; M.A., Duke University; M.A.Ed., Eastern Kentucky State College; Ph.D., University of California at Los Angeles; post graduate work, University of Kentucky. At Eastern since 1955.

JOHN KEIFER, B.S., M.S. Assistant Professor of Geology

B.S., St. Joseph's College; M.S., additional graduate work, University of Illinois. At Eastern since 1967.

HORACE L. KELLEY, A.B., M.A. Assistant Professor of Drama and Speech

A.B., Georgetown University; M.A., Western Kentucky University. At Eastern since 1968.

KARL KEMP, A.B., M.A. Assistant Professor of Economics

A.B., M.A., Western Kentucky State College; additional graduate work at Western Kentucky State College, Eastern Kentucky State College. At Eastern since 1963.

HILDRETH C. KIDD, B.S., M.A. Instructor of Science
Supervising Teacher, Laboratory School

B.S., M.A., Eastern Kentucky University. At Eastern since 1970.

ROY KIDD, B.S., M.A. Assistant Professor of Health and Physical Education, Head Football Coach

B.S., M.A., Eastern Kentucky State College. At Eastern since 1963.

AMY P. KING, B.S., M.A., Ph.D. Assistant Professor of Mathematics

B.S., University of Missouri; M.A., Wichita State University; Ph.D., University of Kentucky. At Eastern since 1970.

LOU RAY KING, A.B., M.P.H. Assistant Professor of Health Education

A.B., University of Kentucky; M.P.H., University of California, Berkeley. At Eastern since 1969.

DOROTHY KIRKPATRICK, B.S., M.S. Assistant Professor of Health and Physical Education

B.S., Winthrop College; M.S., University of Tennessee; additional graduate work, Eastern Kentucky University. At Eastern since 1962.

GLEN A. W. KLEINE, B.S., M.A. Assistant Professor of English

B.S., M.A., University of Missouri; additional graduate work at the University of Missouri. At Eastern since 1967.

ROBERT L. KLINE, B.S., M.A. Assistant Professor of Political Science

B.S., Carroll College; M.A., Northern Illinois University; additional graduate work, University of Colorado. At Eastern since 1969.

PAULINE WILSON KNAPP, B.S., M.A., Ph.D., L.L.D., L.H.D. **Distinguished Professor of Home Economics**

B.S., University of Kentucky; M.A., Ph.D., Columbia University; additional graduate work, New York School of Social Work; L.L.D., Wayne State University; H.L.D., Hillsdale College. At Eastern since 1968.

WILLIAM KNAPP, A.B., LL.B., M.A., Ph.D. **Professor of Psychology**

A.B., Notre Dame, LL.B., Cleveland Law School, M.A., Teachers College, Columbia University, Ph.D., Case Western Reserve, Cleveland, Ohio. At Eastern since 1968.

KARL F. KUHN, B.A., M.S. **Assistant Professor of Physics**

B.A., Bellarmine College; M.S., University of Kentucky. At Eastern since 1966.

TAE-HWAN KWAK, B.A., M.A., Ph.D. **Assistant Professor of Political Science**

B.A., Hanguk University of Foreign Studies, Korea; M.A., Clark University; Ph.D., Claremont Graduate School. At Eastern since 1969.

ROBERT L. LADD, A.B., M.A. **Associate Professor of Foreign Languages**

A.B., Carson Newman College; M.A., George Peabody College; additional graduate work, Xavier University, Peabody College, University of Kentucky, Miami University. At Eastern since 1963.

HARVEY H. LAFUZE, A.B., M.S., Ph.D. **Professor of Biology**

A.B., DePauw University; M.S., Ph.D., State University of Iowa; post doctoral work, Northwestern University. At Eastern since 1939.

CHRISTOPHER E. LAIRD, B.S., M.S., Ph.D. **Associate Professor of Physics**

B.S., M.S., Ph.D., University of Alabama. At Eastern since 1967.

BEN R. LANE, B.A., M.A., Ph.D. **Chairman, Department of Mathematics**
Professor of Mathematics

B.A., M.A., Colorado State College; Ph.D., George Peabody College. At Eastern since 1966.

PRISCILLA LANE, B.A., M.A. **Instructor of Elementary Education**
Supervising Teacher, Laboratory School

B.A., M.A., Eastern Kentucky University. At Eastern since 1967.

ROBERT S. LARANCE, B.S., M.S. **Associate Professor of Biology**

B.S., Louisiana Polytechnic Institute; M.S., Louisiana State University; additional graduate work, Louisiana State University. At Eastern since 1956.

LEWIS H. LARSON, A.B., M.A., Ph.D. **Associate Professor of Anthropology**

A.B., University of Minnesota; M.A., Ph.D., University of Michigan. At Eastern since 1970.

CHARLES E. LASH, B.S., M.A. **Assistant Professor of Industrial Education**

B.S., M.A., Murray State University; additional graduate work, Murray State University, Eastern Kentucky University. At Eastern since 1967.

HAROLD LYNN LATHAM, B.S., M.B.A. **Assistant Professor in Accounting**

B.S., East Tennessee State College; M.B.A., University of Kentucky; C.P.A., Tennessee. At Eastern since 1970.

ROBERT M. LATHROP, B.S., M.A. **Assistant Professor of Geography**
B.S., University of Kentucky; M.A., University of Georgia; additional graduate work, University of Georgia. At Eastern since 1964.

CHARLES M. LATTA, B.A., M.A. **Assistant Professor of English**
B.A., M.A., additional graduate work, University of Louisville. At Eastern since 1966.

HALLER T. LAUGHLIN, B.A., M.A., Ph.D. **Associate Professor of Drama**
B.A., St. Anselm's College; M.A., University of Indiana; Ph.D., Southern Illinois University. At Eastern since 1970.

JOHN C. LAWSON, A.B., M.A. **Assistant Professor of Music**
A.B., Western Kentucky State College; M.A., additional graduate work, George Peabody Teachers College. At Eastern since 1970.

LESLIE H. LEACH, B.S., M.A. **Director of Traffic Safety Institute**
B.S., Eastern Kentucky University; M.A., Western Kentucky University. At Eastern since 1967.

JAMES A. LEE, A.B., M.A., Ph.D. **Chairman, Department of Psychology**
Professor of Psychology
A.B., University of Kentucky; M.A., Wayne State University; Ph.D., Purdue University. At Eastern since 1967.

LOY W. LEE, B.S. **Staff Announcer/Music Supervisor WEKU-FM**
B.S., Memphis State University; additional graduate work, Memphis State University. At Eastern since 1969.

SAMUEL S. LEUNG, B.S., M.S., Ph.D. **Associate Professor of Geology**
B.S., National Taiwan University; M.S., Ph.D., University of Illinois. At Eastern since 1969.

JEROME H. LE VAN, B.S., M.A. **Assistant Professor of Mathematics**
B.S., M.A., University of Alabama; additional graduate work, University of Florida. At Eastern since 1969.

MARIJO O. LE VAN, B.S., M.A., Ph.D. **Associate Professor of Mathematics**
B.S., Spring Hill College; M.A., University of Alabama; Ph.D., University of Florida. At Eastern since 1969.

CLYDE J. LEWIS, A.B., M.A., Ph.D. **Dean, Central University College**
Professor of History and Social Science
A.B., Eastern Kentucky State College; M.A., University of Cincinnati; Ph.D., University of Kentucky. At Eastern since 1946.

***L. MICHAEL LEWIS, B.A., M.A.** **Assistant Professor of Social Science**
B.A., Saint Joseph's College; M.A., University of Notre Dame; additional graduate work, University of Notre Dame. At Eastern since 1968.

RAYMOND J. LEWIS, B.S., M.A. **Assistant Professor of Social Science**
B.S., M.A., Kent State University; additional graduate work, Kent State University, University of Arizona, and the University of Kentucky. At Eastern since 1965.

TOM T. LEWIS, B.A., M.A. **Assistant Professor of Social Science**
B.A., Oklahoma Christian College; M.A., Southern Methodist University; additional graduate work, University of Oklahoma. At Eastern since 1969.

***On leave 1970-71.**

DANIEL A. LICHTY, B.A., M.A. Assistant Professor of Physical Education
Assistant Swimming Coach

B.A., M.A., California State College, Los Angeles. At Eastern since 1969.

BRYAN LINDSAY, B.A., M.A., Ph.D. Chairman, General Studies
Humanities Program
Professor of Humanities

B.A., Troy State College; M.A., Ph.D., George Peabody College. At Eastern since 1969.

PAUL E. LITTLE, B.S., Ph.D. Assistant Professor of Physics

B.S., Eastern Kentucky; Ph.D., Vanderbilt University. At Eastern since 1970.

JOHN M. LONG, A.B., M.A., Ph.D. Chairman, English Composition Program
Associate Professor of English

A.B., Furman University; M.A., Northeastern University; Ph.D., University of North Carolina. At Eastern since 1967.

HEINO A. LUTS, B.S., M.S., Ph.D. Associate Professor of Chemistry

B.S., Upsala (Sweden); M.S., Ph.D., University of Mississippi. At Eastern since 1967.

JACK A. LUY, B.S., M.S., Ed.D. Associate Dean, College of Applied
Arts and Technology
Professor of Industrial Education

B.S., M.S., Stout State University; Ed.D., University of Missouri. At Eastern since 1964.

EDITH V. LYNCH, B.A., M.A. Instructor of English

B.A., University of Kentucky; M.A., University of Chicago. At Eastern since 1969.

BRUCE MacLAREN, B.A., M.S. Assistant Professor of Physical Science

B.A., Luther College; M.S., University of Wisconsin; additional graduate work, University of Wisconsin. At Eastern since 1969.

***RUTH A. McCANN, B.S., M.A., Ed.S.** Assistant Professor of Business
Supervising Teacher, Laboratory School

B.S., M.A., Eastern Kentucky State College; Ed.S., University of Kentucky. At Eastern since 1962.

JAMES McCHESNEY, B.S., M.S., Dir.R. Acting Chairman, Department of
Recreation and Park Administration;
Assistant Professor of Recreation
and Physical Education

B.S., M.S., Western Kentucky University; Dir.R., Indiana University; additional graduate work, Indiana University. At Eastern since 1966.

LOUIS A. McCORD, A.B., M.A., Th.B. Assistant Professor of Social Science

A.B., Berea College; M.A., West Virginia University; Th.B., Southern Baptist Seminary; additional graduate work, West Virginia University. At Eastern since 1969.

ALVIN McGLASSON, B.S., M.S. Associate Professor of Mathematics

B.S., Eastern Kentucky State College; M.S., University of Kentucky; additional graduate work, University of Kansas, University of Missouri, Michigan State University. At Eastern since 1949.

*On leave 1970-71.

MARY McGLASSON, A.B., M.A. Instructor of Biology

A.B., M.A., Eastern Kentucky University; additional graduate work at Eastern Kentucky University and University of Virginia. At Eastern since 1967.

WILLARD THOMAS McHONE, A.B., M.Ed. Associate Professor of Art Education

A.B., Eastern Kentucky State College; M.Ed., University of Louisville; additional graduate work, University of Kentucky, Indiana University. At Eastern since 1955.

ALEX GENTRY McILVAINE, JR., B.S., M.A. Professor of Accounting

B.S., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky. At Eastern since 1947.

WILLIAM A. McKENNEY, JR., A.B., M.A., Ph.D. Chairman, Department of Educational Foundations; Professor of Educational Foundations

A.B., M.A., University of Kentucky; Ph.D., Florida State University. At Eastern since 1969.

T. BRUCE McLEAN, B.S., M.A. Assistant Professor of Mathematics

B.S., Ohio Northern University; M.A., Bowling Green State University; additional graduate work, University of Kentucky. At Eastern since 1969.

HELEN JOAN McLENDON, B.A., M.A., M.Ed. Assistant Professor of Social Studies Education

B.A., M.A., Wheaton College; M.Ed., University of Illinois; additional graduate work at University of Illinois. At Eastern since 1970.

CHARLES McQUEEN, B.S., M.A. Instructor of Industrial Arts
Supervising Teacher, Laboratory School

B.S., M.A., Eastern Kentucky University. At Eastern since 1969.

JAY C. MAHR, B.A., M.S., Ph.D. Professor of Physics

B.A., St. Mary's College; M.S., Notre Dame; Ph.D., Catholic University. At Eastern since 1968.

ARTHUR J. MANGUS, JR., A.B., M.A. Assistant Professor of English

A.B., Concord College; M.A., Marshall College; additional graduate work, University of Kentucky. At Eastern since 1959.

PHILIP H. MANKIN, B.S., M.A. Associate Professor of English

B.S., M.A., George Peabody College for Teachers; additional graduate work, Vanderbilt University. At Eastern since 1957.

WALTER MARCUM, B.S., M.A. Associate Professor of Educational Administration

B.S., Union College; M.A., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1964.

RONALD L. MARIONNEAUX, B.A., M.A., Ph.D. Associate Professor of Geography

B.A., Northeast Louisiana State College; M.A., Louisiana State University; Ph.D., Indiana University. At Eastern since 1969.

W. DOUGLAS MARSHALL, B.S. Operations Engineer
Division of Instructional Service

B.S., Eastern Kentucky University. At Eastern since 1968.

HENRY G. MARTIN, B.A., M.A., Ed.D. **Chairman, Department of Educational Administration Professor of Educational Administration**

B.A., Berea College; M.A., University of Kentucky; Ed.D., University of Tennessee. At Eastern since 1955.

LARRY O. MARTIN, B.S., M.A. **Assistant Professor of Industrial Education Director of Auxiliary Enterprises**

B.S., M.A., Eastern Kentucky State College. At Eastern since 1960.

WILLIAM H. MARTIN, B.S., M.S. **Assistant Professor of Biological Science**

B.S., Tennessee Technological University; M.S., University of Tennessee; additional graduate work, University of Tennessee. At Eastern since 1969.

JAMES W. MASTERSON, B.S., M.A. **Assistant Professor of Industrial Technology**

B.S., M.A., Eastern Kentucky University; additional graduate work, Eastern Kentucky University. At Eastern since 1969.

MILDRED MAUPIN, B.S., M.A. **Assistant Professor of Health and Physical Education**

B.S., Appalachian State Teachers College; M.A., Eastern Kentucky State College; additional graduate work, Eastern Kentucky University and University of Kentucky. At Eastern since 1962.

DAVID M. MEEKS, B.S., M.B.A. **Instructor of Management and Finance**

B.S., Lambuth College; M.B.A., Memphis State University. At Eastern since 1966.

JOHN L. MEISENHEIMER, B.A., Ph.D. **Professor of Chemistry**

B.A., Evansville College; Ph.D., Indiana University; post-doctoral research, Indiana University. At Eastern since 1963.

VICTOR MESSMER, B.S., M.B.A. **Assistant Professor of Accounting**

B.S., Eastern Kentucky State College; M.B.A., University of Kentucky; additional graduate work, Case Institute of Technology, University of Illinois. At Eastern since 1961.

GLORIA S. METCALF, B.S., M.A. **Assistant Professor of Elementary Education, Supervising Teacher, Laboratory School**

B.S., M.A., Eastern Kentucky University. Additional graduate work at Eastern Kentucky University. At Eastern since 1964.

JERRY L. MILLER, B.S., M.A., Ed.D. **Associate Professor of Traffic Safety**

B.S., M.A., Eastern Kentucky University; Ed.D., West Virginia University. At Eastern since 1970.

ROBERT J. MILLER, B.S., M.S.T., Ph.D. **Assistant Professor of Science Education**

B.S. in Science, Mankato State College; M.S.T. in Chemistry, University of North Dakota; Ph.D., University of Texas. At Eastern since 1969.

THOMAS A. MILLER, B.M.E., M.M.E. **Assistant Professor of Music**

B.M.E., Anderson College; M.M.E., Wichita State University; additional graduate work, University of Missouri-Kansas City. At Eastern since 1969.

DONALD BENSON MILLS, B.S., M.A. Assistant Professor of Educational Foundations

B.S., M.A., Eastern Kentucky State College; additional graduate work at University of Maryland. At Eastern since 1965.

KAY B. MILLS, B.S., M.A. Instructor of Elementary Education, Supervising Teacher, Laboratory School

B.S., M.A., University of Kentucky. At Eastern since 1968.

MARGARET H. MOBERLY, B.S., M.B.A. Professor of Business Education and Office Administration

B.S., Eastern Kentucky State College; M.B.A., University of Chicago; additional graduate work, University of Kentucky. At Eastern since 1946.

AMIYA K. MOHANTY, B.A., M.A., D.S.S.M., Ph.D. Associate Professor of Sociology

B.A., Utkal University (India); M.A., Bombay University (India); Diploma in Social Science Methodology, Utkal University (India); Ph.D., Florida State University. At Eastern since 1969.

***DALE R. MONSEBROTEN, Ph.B., M.S.** Instructor of Geography

Ph.B., M.S., University of Dakota. At Eastern since 1966.

ROBERT C. MOODY, B.A., J.D. Assistant Professor of Law Enforcement

B.A., J.D., University of Kentucky. At Eastern since 1969.

JOHN THOMAS MOORE, B.S., M.B.A., C.P.A. Assistant Professor in Accounting

B.S., Miami University; M.B.A., Indiana University; C.P.A., Kentucky. At Eastern since 1970.

ELMO E. MORTEZ, B.S., M.A., Ed.D. Dean, The Graduate School Professor of Education

B.S., M.A., Appalachian State University; Ed.D., University of Miami, Coral Gables, Florida. At Eastern since 1967.

WILLIAM ALFRED MORRIS, B.A., M.A., Ed.D. Chairman, Department of Elementary Education Associate Professor of Elementary Education

B.A., Harding College; M.A., Long Beach State College; Ed.D., George Peabody College for Teachers. At Eastern since 1969.

WILLIAM R. MORROW, B.S., M.S., Ph.D. Associate Professor of Economics

B.S., West Virginia University; M.S., Ph.D., University of Tennessee. At Eastern since 1968.

WILLIE MOSS, B.S., M.A. Associate Professor of Home Economics

B.S., Western Kentucky State College; M.A., University of Kentucky; additional graduate work, University of Kentucky, Merrill Palmer School, University of Tennessee. At Eastern since 1952.

PAUL C. MOTLEY, B.S., M.A., Ed.S. Assistant Professor of Physical Education

B.S., M.A., Ed.S., Eastern Kentucky University. At Eastern since 1969.

EDSEL R. MOUNTZ, B.S., M.A. Assistant Professor of Business Education and Office Administration

B.S., Eastern Kentucky State College; M.A., University of Kentucky; additional graduate work at University of Kentucky. At Eastern since 1956.

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*On leave 1970-71.

MARTHA MULLINS, B.S., M.S., Ph.D. **Assistant Professor of Physical Education**

B.S., University of Alabama; M.S. and Ph.D., Florida State University. At Eastern since 1969.

GEORGE E. MUNS, B.A., M.A., Ph.D. **Chairman, Department of Music Professor of Music**

B.A., University of Missouri; M.A., Ph.D., University of North Carolina. At Eastern since 1969.

JAMES GLENN MURRAY, A.A., B.S., M.A. **Instructor of Health Athletic Trainer**

A.A., Schreiner Inst. Jr. College; B.S., University of Texas at Austin; M.A., East Tennessee State University. At Eastern since 1969.

BERT MUTERSBAUGH, A.B., M.A. **Assistant Professor of History**

A.B., M.A., University of Missouri; additional graduate work at University of Missouri. At Eastern since 1967.

CHERIE MUTERSBAUGH, B.A., M.A. **Instructor of English and Social Studies Supervising Teacher, Laboratory School**

B.A., Central Methodist College; M.A., Eastern Kentucky University. At Eastern since 1969.

NILA JEAN MYERS, B.S., M.A. **Assistant Professor of Education Counselor, Laboratory School**

B.S., Western Kentucky University; M.A., Eastern Kentucky University. At Eastern since 1968.

THOMAS D. MYERS, B.S., M.S., Ed.D. **Dean of Students Associate Professor of Health**

B.S., M.S., Bowling Green State University; Ed.D., Temple University. At Eastern since 1964.

THOMAS E. MYERS, BA., MA. **Associate Professor of Industrial Education**

B.A., M.A., North Texas State University; additional graduate work, University of Kentucky and Colorado State College. At Eastern since 1952.

DIXIE BALE MYLUM, A.B., M.A. **Assistant Professor of Social Science**

A.B., Meredith College; M.A., Eastern Kentucky State College. At Eastern since 1965.

BOBBY NAYLE, B.S., M.A. **Instructor of Mathematics**

B.S., University of Kentucky; M.A., Western Kentucky State College; additional graduate work at Auburn University. At Eastern since 1967.

DOUGLAS J. NIELAND, B.A., M.A. **Assistant Professor of Recreation**

B.A., Iowa Northern University; M.S., Indiana University. At Eastern since 1969.

CHARLES L. NELSON, A.B., M.A., Ph.D. **Chairman, Department of Foreign Languages and Professor of Spanish**

A.B., M.A., Ph.D., University of North Carolina at Chapel Hill. At Eastern since 1967.

JOHN W. NELSON, B.A., M.A., Ph.D. **Assistant Professor of English**

B.A., Trinity College; M.A., Ph.D., Ohio State University. At Eastern since 1970.

THERESA C. NEWHOFF, A.B., M.A. **Assistant Professor of Art and Education**

A.B., M.A., University of Kentucky; additional graduate work at Duke University, University of Southern California, Art Institute of Chicago, University of Kentucky. At Eastern since 1967.

GOEBEL W. NEWSOM, JR., A.B. **Assistant Division of University-School Relations**

A.B., Western Kentucky University; graduate work, University of Kentucky, Eastern Kentucky University. At Eastern since 1969.

DAVID NG, B.S., M.S., M.A. **Assistant Professor of Mathematics**

B.S., Hardin Simmons University; M.S., University of Arkansas; M.A., Appalachian State College; additional graduate work at University of Florida. At Eastern since 1967.

LANDON NICHOLS, B.A., M.A. **Assistant Professor Social Science**

B.A., Arizona State University; M. A., New Mexico Highlands University; additional graduate work at Kansas University. At Eastern since 1970.

ROBERT L. NICHOLS, B.S., M.A., Ph.D. **Distinguished Professor of Geology**

B.S., Tufts College; M.A., Ph.D., Harvard University. At Eastern since 1969.

JOSEPHINE M. NIMS, A.B., M.A. **Assistant Professor of English**

A.B., M.A., University of Kentucky. At Eastern since 1965.

ANTON N. NYERGES, B.A., M.A., Ph.D. **Professor of Social Science**

B.A., M.A., Ph.D., Indiana University. At Eastern since 1969.

WALTER M. ODUM, B.A., M.A. **Assistant Professor of History**

B.A., M.A., Florida State University; additional graduate work, Florida State University. At Eastern since 1964.

FREDERIC D. OGDEN, A.B., Ph.D. **Dean, College of Arts and Sciences**
Professor of Political Science

A.B., Tusculum College; Ph.D., Johns Hopkins University. At Eastern since 1961.

ROBERT L. OGLE, B.S., M.S., Ed.D. **Professor of Industrial Education**

B.S., M.S., Ed.D., University of Tennessee. At Eastern since 1966.

JANET OLDHAM, B.S., M.S. **Assistant Professor of English**

B.S., North Central College; M.S., University of Illinois; additional graduate work, Eastern Kentucky State College, University of Kentucky, Columbia University. At Eastern since 1962.

JAMES N. O'NEILL, B.A., M.A., Ph.D. **Assistant Professor of History**

B.A., University of Mississippi; M.A., Northwestern University; Ph.D., University of Virginia. At Eastern since 1966.

CECIL C. ORCHARD, B.A., M.A. **Assistant Professor of Social Science and History**

B.A., Brigham Young University; M.A., Brandeis University; additional graduate work at Brandeis University. At Eastern since 1966.

RAYMOND B. OTERO, B.S., M.S., Ph.D. **Assistant Professor of Biology**

B.S., University of Dayton; M.S., University of Rochester; Ph.D., University of Maryland. At Eastern since 1968.

GENEVA W. OWENS, A.B., M.A. **Assistant Professor of English Education**

A.B., M.A., Eastern Kentucky State College; additional graduate work, University of Kentucky, Eastern Kentucky State College. At Eastern since 1960.

WILLIS M. PARKHURST, A.B., M.S. **Associate Professor of Psychology**

A.B., M.S., Indiana State Teachers College; additional graduate work, University of Miami, Purdue University. At Eastern since 1955.

CLIFFORD R. PARSONS, B.S., M.A. **Counselor**

B.S., M.A., Eastern Kentucky State College; additional graduate work, Miami University. At Eastern since 1967.

ALFRED L. PATRICK, B.S., M.Ed., Ed.D. **Chairman, Department of Business Education and Office Administration**
Professor of Business Education

B.S., M.Ed., Virginia Polytechnic Institute; Ed.D., University of Tennessee. At Eastern since 1965.

DALE R. PATRICK, B.S., M.S. **Associate Professor of Industrial Education**

B.S., M.S., Indiana State Teachers College; additional graduate work, Indiana State University. At Eastern since 1956.

KERMIT PATTERSON, B.S., M.B.A., Ed.D. **Associate Professor of Business Administration**

B.S., M.B.A., Ed.D., University of Kentucky; additional graduate work, Case Institute of Technology. At Eastern since 1955.

NANCY D. PEEL, B.S., M.A., Ed.D. **Associate Professor of Elementary Education**

B.S., M.A., University of Kentucky; Ed.D., Indiana University. At Eastern since 1967.

L. CROCKER PEOPLES, B.S., Ph.D. **Associate Professor of Psychology**

B.S., Carson Newman College; Ph.D., University of Tennessee. At Eastern since 1970.

PAULINE PERRY, B.A., M.A. **Assistant Professor of English**

B.A., M.A., East Texas State University; additional graduate work, North Texas State University and Louisiana State University. At Eastern since 1968.

FREDERICK R. PETERSON, B.M., B.M.E., M.M. **Instructor of Music**

B.M., B.M.E., M.M., Indiana University. At Eastern since 1967.

D. B. PETTENGILL, A.B., M.A., Ph.D. **Chairman, Department of Political Science**
Professor of Political Science

A.B., M.A., University of Florida; Ph.D., The Johns Hopkins University. At Eastern since 1965.

IONA M. PETTENGILL, R.N., B.S. **Assistant Professor of Nursing**

Diploma, Maine General Hospital School of Nursing; B.S., University of Maryland; additional graduate work, University of Florida. At Eastern since 1965.

GEORGE PFOTENHAUER, JR., B.Ed., M.S. **Coordinator of Instructional Media**
Instructional Services

A.A., Wilson Junior College; B.Ed., Chicago Teachers College; M.S., Indiana University. At Eastern since 1969.

JUANITA PHILLIPS, B.A., B.S.L.S., Ed.S. **Chairman, Department of Library Science**
Associate Professor of Library Science

B.A., West Texas State College; B.S.L.S., Ed.S., George Peabody College for Teachers. At Eastern since 1966.

ODELL PHILLIPS, B.S., M.A., Ph.D. **Associate Professor of Health and Physical Education**

B.S., Murray State College; M.A., University of Alabama; Ph.D., Florida State University. At Eastern since 1965.

***RONALD E. PIERCE, B.S., M.S.** **Instructor of Mathematics**

B.S., Morehead State College; M.S., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1964.

E. G. PLUMMER, A.B., M.A. **Assistant Professor of Health and Physical Education; Cross Country—Track and Field Coach**

A.B., M.A., University of Kentucky. At Eastern since 1969.

GERALDINE J. POLVINO, B.S., M.A. **Assistant Professor of Physical Education**

B.S., State University College at Brockport; M.A., Eastern Kentucky University; additional graduate work, Eastern Kentucky University and University of Iowa. At Eastern since 1966.

ROBERT E. POSEY, B.A., M.S. **Director, School of Law Enforcement**
Associate Professor of Law Enforcement

B.A., Georgetown College; M.S., Michigan State University. At Eastern since 1966.

HOWARD B. POWELL, B.S., M.A., Ph.D. **Associate Professor of Chemistry**

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J. C. POWELL, A.B., M.Ed., Ed.D. **Vice President for Administration**
Associate Professor of Education

A.B., University of Kentucky; M.Ed., University of Louisville; Ed.D., University of Kentucky. At Eastern since 1960.

LOUIS A. POWER, B.S., M.A. **Assistant Professor of Education**
Assistant, Division of University-School Relations

B.S., M.A., Eastern Kentucky University; additional graduate work, University of Kansas and Western Kentucky University. At Eastern since 1969.

GLENN E. PRESNELL, B.S. **Director of Athletics**
Assistant Professor of Health and Physical Education

B.S., University of Nebraska; additional graduate work, University of Nebraska, Eastern Kentucky State College. At Eastern since 1947.

***On leave 1970-71.**

ROGER L. PREWITT, B.S., M.A. **Instructor of Industrial Technology**

B.S., M.A., Eastern Kentucky University; additional graduate work, Eastern Kentucky University. At Eastern since 1968.

HENRY F. PRYSE, A.B., M.A. **Director of University-School Relations**
Director of Upward Bound Program
Assistant Professor of Education

A.B., Centre College; M.A., Eastern Kentucky State College; additional graduate work, Eastern Kentucky State College; University of Kentucky. At Eastern since 1959.

DENNIS E. QUILLEN, B.S., M.S. **Assistant Professor of Geography**

B.S., M.S., University of Tennessee; additional graduate work at the University of Tennessee. At Eastern since 1967.

ELIZABETH RAGLAND, A.B., M.A. **Assistant Professor of Mathematics**
Supervising Teacher, Laboratory School

A.B., M.A., University of Kentucky; additional graduate work, University of Kentucky and University of Florida. At Eastern since 1967.

LESLIE CHARLES RAMSDELL, B.S., M.S. **Assistant Professor of Health Education**

B.S., Lyndon State College; M.S., Indiana University; additional graduate work, West Virginia University. At Eastern since 1970.

IMOGENE RAMSEY, B.S., M.A., Ed.D. **Assistant Professor of Elementary Education**

B.S., M.A., Eastern Kentucky State College; Ed.D., Indiana University. At Eastern since 1965.

ROBERT W. RANDALL, A.B., M.A. **Assistant Professor of Social Studies Education**

A.B., Wheaton College; M.A., University of Kentucky. At Eastern since 1967.

RUTH RANKIN, A.B., M.A. **Assistant Professor of English**
Supervising Teacher, Laboratory School

A.B., Asbury College; M.A., University of Kentucky; additional graduate work, University of Kentucky, Eastern Kentucky University and Duke University. At Eastern since 1964.

PETER P. REMALEY, B.S. in Ed., M.A. **Assistant Professor of English**

B.S. in Ed., Clarion State College (Pa.); M.A., Kent State University; additional graduate work, Carnegie-Mellon University. At Eastern since 1969.

BYNO R. RHODES, B.A., M.A., Ph.D. **Professor of English**

B.A., M.A., Ph.D., Vanderbuilt University. At Eastern since 1958.

***WALTER MASON RICHARD, B.B.A., M.B.A.** **Assistant Professor of Accounting**

B.B.A., M.B.A., Memphis State University. At Eastern since 1967.

NANCY L. RIFFE, B.A., A.M., Ph.D. **Associate Professor of English**

B.A., Agnes Scott College; A.M., Radcliffe College; Ph.D., University of Kentucky. At Eastern since 1968.

***On leave 1969-70.**

J. G. RIGGS, B.A., M.A. — **Assistant Professor of Psychology**

B.A., M.A., Wayne State University. Additional graduate work, Wayne State University. At Eastern since 1968.

DOUGLAS D. RINGWALL, B.A., M.A. — **Assistant Professor of Political Science**

B.A., M.A., University of Georgia; additional graduate work, Georgetown University. At Eastern since 1969.

GENE BAILEY ROBBINS — **Chief Engineer**
Division of Instructional Services

Graduate of Coyne Radio and Television School. At Eastern since 1966.

F. JAY ROBERTS, B.A. — **Assistant Professor of English**

B.A., Eastern Kentucky University; additional graduate work, University of California at Davis. At Eastern since 1969.

MARY MARSHALL ROBERTS, A.B.Ed., M.A., Ed.D. — **Associate Professor of Rehabilitation Education**

A.B.Ed., University of Kentucky; M.A., Texas Woman's University; Ed.D., University of Colorado. At Eastern since 1969.

GEORGE W. ROBINSON, B.S., M.S., Ph.D. — **Chairman, Department of History**
Professor of History

B.S., M.S., Ph.D., University of Wisconsin. At Eastern since 1956.

JOEL M. ROITMAN, B.A., M.A. — **Assistant Professor Social Science**

B.A., Memphis State University; M.A., Memphis State University; additional graduate work at University of Tennessee and University of Cincinnati. At Eastern since 1970.

CHARLES L. ROSS, A.B., M.A., Ed.D. — **Professor of Educational Administration**

A.B., Tusculum College; M.A., George Peabody College; Ed.D., University of Tennessee. At Eastern since 1963.

LEON ROTTERSMAN, B.A., M.A., Ph.D. — **Professor of Psychology**

B.A., New York University; M.A., University of Nebraska; Ph.D., University of Denver. At Eastern since 1966.

JOHN D. ROWLETT, B.S., M.S., ED.D. — **Vice President for Research and Development**
Professor of Industrial Education

B.S., M.S., North Texas State University; Ed.D., University of Illinois. At Eastern since 1951.

WARD J. RUDERSDORF, B.S., M.S., Ph.D. — **Associate Professor of Biology**

B.S., Central State Teachers College; M.S., Utah State University; Ph.D., Michigan State University. At Eastern since 1967.

DAVID L. RUSH, A.B., M.A., Ed.D. — **Assistant Professor of Educational Administration**

A.B., M.A., Eastern Kentucky University; Ed.D., Ball State University. At Eastern since 1970.

LOWELL M. SALTER, B.B.A., M.B.A. — **Assistant Professor of Business Administration**

B.B.A., M.B.A., Southern Methodist University; additional graduate work, University of Arkansas. At Eastern since 1969.

DARNELL SALYER, B.S., Ph.D. **Professor of Chemistry**

B.S., Eastern Kentucky State College; Ph.D., Ohio State University. At Eastern since 1959.

ETHEL SAMS, B.S., M.A. **Assistant Professor of Elementary Education**

B.S., Eastern Kentucky State College; M.A., George Peabody College; additional graduate work, University of Louisville and Eastern Kentucky State College. At Eastern since 1963.

RICHARD SCHAFFER, B.S. **Assistant Professor Biological Science**

B.S., Moravian College; completing doctoral work at Indiana University. At Eastern since 1970.

PETER A. SCHNEIDER, A.B., M.A. **Instructor of Speech**

A.B., Queen's College; M.A., Ball State University. At Eastern since 1967.

JOAN L. SCHOOLER, B.S., M.S. **Instructor of Drama**

B.S., M.S., Portland State University. At Eastern since 1970.

EUGENE E. SCHROEDER, B.S., M.S., Ph.D. **Associate Professor of Biology**

B.S., St. Olaf College; M.S., University of New Mexico; Ph.D., University of Missouri. At Eastern since 1967.

WILLIAM S. SCHULZ, B.A., M.A. **Assistant Professor of Chemistry**

B.A., M.A., Mankato State College; additional graduate work, Louisana State University. At Eastern since 1968.

JOSEPH R. SCHWENDEMAN, B.S., M.A., Ph.D. **Distinguished Professor of Geography**
Consultant and Advisor for Professional Activities

B.S., Ohio University; M.A., Ph.D., Clark University. At Eastern since 1967.

JOSEPH R. SCHWENDEMAN, JR., B.S., M.S., Ph.D. **Chairman, Department of Geography**
Professor of Geography

B.S., M.S., University of Kentucky; Ph.D., Indiana University. At Eastern since 1966.

FRANCESCO G. SCORSONE, B.A., Ph.D. **Professor of Mathematics**

B.A., Umberto I, Palermo, Italy; Ph.D., Palermo University. At Eastern since 1965.

MARIA SCORSONE, A.B., Ph.D. **Assistant Professor of Spanish**

A.B., R. Instituto Magistrale F.A., Palermo, Italy; Ph.D., Syracuse University. At Eastern since 1968.

BRETT D. SCOTT, B.S., M.Ed. **Assistant Professor of Law Enforcement**

B.S., Pikeville College; M.Ed., University of Louisville; additional graduate work, Eastern Kentucky University. At Eastern since 1967.

ROBERT J. SCOTT, A.B., M.Div. **Assistant Professor of Philosophy**
Counselor

A.B., Eastern Kentucky University; M.Div., Lexington Theological Seminary. At Eastern since 1970.

CHARLES EUGENE SCRUGGS, A.B., M.A., Ph.D. **Associate Professor of French**

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LL.D., Charles University in Prague, Czechoslovakia; M.A., McGill University in Montreal, Canada; Ph.D., Polish University in Exile, London, England. At Eastern since 1968.

CHERYLE SEXTON, A.B. **Graphic Artist, TV Div. of Instructional Serv.**

B.A., Eastern Kentucky University. At Eastern since 1968.

WILLIAM E. SEXTON, B.S., M.Ed., Ed.D. **Dean, College of Applied Arts and Technology**
Professor of Industrial Technology

B.S., Eastern Kentucky State College; M.Ed., University of Illinois; Ed.D., University of Missouri. At Eastern since 1957.

PAUL SEYFRIT, B.S., M.A. **Assistant Professor of Psychology**

B.S., M.A., University of Louisville; additional graduate work University of Louisville. At Eastern since 1965.

DONALD SHADOAN, B.S., M.S., Ph.D. **Chairman, Department of Economics**
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B.S., M.S., Ph.D., University of Kentucky. At Eastern since 1962.

WILLIAM A. SHANNON, B.S., M.A. **Assistant Professor of Health and Physical Education, Assistant Football Coach**

B.S., M.A., Eastern Kentucky State College; additional graduate work at University of Virginia, University of Kentucky, Eastern Kentucky State College. At Eastern since 1964.

ROBERT R. SHARP, B.S., Ph.D. **Assistant Professor of Economics**

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DANIEL N. SHINDELBOWER, A.B., M.A. **Chairman, Department of Art**
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CHARLES V. SHIPLEY, LL.B. **Assistant Professor of Traffic Safety**

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A.B., Kentucky State College; M.A., Eastern Kentucky University. At Eastern since 1969.

PAULINA F. SLOAN, R.N., A.B., M.A. **Associate Professor of Nursing; Coordinator, Associate of Arts Degree Program in Nursing**

Diploma, Louisville General Hospital School of Nursing; A.B., M.A., University of Kentucky. At Eastern since 1970.

G. PAUL SMEYAK, B.F.A., M.A. **Assistant Professor of Broadcasting**

B.F.A., Ohio University; M.A., additional graduate work, Ohio State University. At Eastern since 1970.

HARRY M. SMILEY, B.S., M.S., Ph.D. **Chairman, Department of Chemistry**
Professor of Chemistry

B.S., Eastern Kentucky University; M.S., Ph.D., University of Kentucky. At Eastern since 1967.

CLAUDE K. SMITH, B.S., M.R.E., M.B.A., C.P.A. **Chairman, Department of Accounting**
Professor of Accounting

B.S., Eastern Kentucky State College; M.R.E., Southern Baptist Theological Seminary; M..B.A., University of Kentucky; C.P.A., Indiana, Kentucky. At Eastern since 1964.

DONALD HINSLEA SMITH, A.B. **Assistant Dean of Students**
Office of Student Affairs

A.B., Eastern Kentucky State College. At Eastern since 1966.

DOROTHY H. SMITH, B.S., M.A. **Instructor of Elementary Education**
Supervising Teacher, Laboratory School

Aroostook State Teachers College; Eliot-Pearson School; B.S., M.A., Eastern Kentucky University. At Eastern since 1966.

KATHLEEN SMITH, BA., M.A. **Instructor of English**

B.A., Eastern Kentucky State College; M.A., University of Kentucky; additional graduate work, Eastern Kentucky State College and University of Kentucky. At Eastern since 1966.

THEODORE N. SMITH, B.A., M.A., Ph.D. **Professor of Speech**

B.A., Central Methodist College; M.A., University of Missouri; Ph.D., Michigan State University. At Eastern since 1970.

RICHARD SNARR, B.S., M.A. **Assistant Professor of Law Enforcement**

B.S., Wittenberg University; M.A., University of Kentucky; additional graduate work, North Texas State University and University of California. At Eastern since 1969.

SHIRLEY SNARR, A.B., M.S. **Assistant Professor of Home Economics**

A.B., Wittenburg University; M.S., University of Kentucky; additional graduate work, University of California and Ohio State University. At Eastern since 1968.

JAMES G. SNOWDEN, A.B., M.A., Ed.D. **Professor of Educational Psychology**

A.B., M.A., University of Kentucky; Ed.D., Indiana University. At Eastern since 1954.

HOWARD D. SOUTHWOOD, A.B., M.Ed., Ed.D. **Professor of Educational Psychology and Guidance**

A.B., University of Kentucky; M.Ed., University of Florida; Ed.D., University of Florida. At Eastern since 1969.

BARBARA E. SOWDERS, A.B., M.A.Ed., M.A. **Instructor of English**

A.B., M.A.Ed., M.A., Eastern Kentucky University. At Eastern since 1967.

JEANETTE B. SOWDERS, A.B., M.A. **Instructor of Library Science**
Librarian, Laboratory School

A.B., M.A., Eastern Kentucky State College; additional graduate work, Eastern Kentucky University. At Eastern since 1969.

ALBERT G. SPENCER, B.S., M.Ed., Ed.D. **Assistant Professor of Industrial Education**

B.S., Eastern Kentucky University; M.Ed., Ed.D., University of Missouri. At Eastern since 1969.

PEGGY STANALAND, B.A., M.A., P.E.D. **Associate Professor of Physical Education**

B.A., M.A., Florida State University; P.E.D., Indiana University. At Eastern since 1968.

ALAN P. STAPLES, B.M., M.M. **Assistant Professor of Music**

B.M., M.M., Eastman School of Music, University of Rochester; additional graduate work, Eastman School of Music, University of Rochester and University of Cincinnati. At Eastern since 1961.

ANNA M. STARK, A.B., M.A. **Assistant Professor of Elementary Education**

A.B., University of Kentucky; M.A., Teachers College, Columbia University; additional graduate work, University of Kentucky. At Eastern since 1963.

BEN STARK, A.B., M.A., Diploma (Social Work) **Associate Professor of Social Work**

A.B., M.A., University of Kentucky; Diploma in Social Work, New York School of Social Work. At Eastern since 1967.

JULIA B. STEANSON, A.B., M.A. **Assistant Professor of Spanish**

A.B., Stetson; M.A., University of North Carolina; additional graduate work, University of Kentucky. At Eastern since 1967.

K. ANN STEBBINS, B.S., M.A. **Instructor of Social Science**

B.S., Bowling Green State University; M.A., University of Kentucky. At Eastern since 1969.

***ROBERT E. STEBBINS, B.A., B.D., M.A., Ph.D.** **Professor of History**

B.A., Bowling Green State University; B.D., Yale University; M.A., Ph.D., University of Minnesota. At Eastern since 1963.

SYDNEY STEPHENS, JR., B.S., M.S. **Associate Professor of Mathematics**

B.S., Eastern Kentucky State College; M.S., University of Illinois; additional graduate work, University of Wyoming, University of Illinois, University of Kentucky. At Eastern since 1956.

PATRICIA STEPHENSON, B.M.E., M.M. **Assistant Professor of Music**

B.M.E., M.M., Northwestern University; additional graduate work at Ball State University, Indiana University, Teachers College, Columbia University and University of Iowa. At Eastern since 1967.

***On leave second semester, 1970-71.**

MURRELL P. STEWART, B.S., M.A., Ed.D. **Associate Professor of Educational Administration**

B.S., M.A., Eastern Kentucky University; Ed.D., University of Kentucky. At Eastern since 1968.

JAMES WILLIAM STOCKER, B.S., M.S. **Associate Professor of Agriculture**

B.S., Eastern Kentucky State College; M.S., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1946.

BETTY J. STOESS, A.B., M.A., Ph.D. **Assistant Professor of Science Education**

A.B., University of Louisville; M.A,. Ph.D., Ohio State University. At Eastern since 1970.

KARA LYNN STONE, A.B., M.A. **Instructor of Social Science**

A.B., Knoxville College; M.A., Eastern Kentucky University; additional graduate work, University of Maryland, Virginia Polytechnic Institute. At Eastern since 1969.

ROBERT C. STONE, B.S., LLB. **Executive Director, Kentucky Law Enforcement Council and Lecturer, School of Law Enforcement**

B.S., LL.B., University of Kentucky. At Eastern since 1966.

THOMAS F. STOVALL, B.A., M.A., Ph.D. **Dean of the Faculties, Vice President for Academic Affairs**

B.A., University of Tennessee; M.A., Ph.D., George Peabody College for Teachers. At Eastern since 1966.

GUY R. STRONG, B.S., M.A. **Assistant Professor of Health and Physical Education Head Basketball Coach**

B.S., M.A., Eastern Kentucky State College. At Eastern since 1967.

JAMES C. STULL, B.S.Ed., M.S., Ph.D. **Associate Professor of Educational Foundations**

B.S.Ed., Bowling Green State University; M.S., Indiana University; Ph.D., University of Toledo. At Eastern since 1965.

JOHN T. SULLIVAN, B.A. **Coordinator of Radio Div. of Instructional Serv.**

B.A., Eastern Kentucky University. At Eastern since 1965.

ROBERT W. SURPLUS, B.A., M.A., Ed.D. **Professor of Music and Education**

B.S., Susquehanna University; M.A., Ed.D., Teachers College, Columbia University. At Eastern seinc 1965.

ANN D. SURVANT, A.B., M.A., Ph.D. **Assistant Professor of Elementary Education**

A.B., M.A., Ph.D., University of Kentucky. At Eastern since 1969.

DORIS G. SUTTON, A.B., M.A. **Instructor of English**

A.B., Georgetown College; M.A., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1969.

G. WILLIAM SUTTON, A.B., M.A., Ph.D. **Associate Professor of English**

A.B., Georgetown College; M.A., Ph.D., University of Mississippi. At Eastern since 1967.

CHARLES A. SWEET, JR., A.B., A.M., Ph.D. **Assistant Professor of English**

A.B., Washington and Lee University; A.M., Ph.D., Florida State University. At Eastern since 1970.

WILLARD E. SWINFORD, B.S., M.A. **Associate Professor of Industrial Education**

B.S., M.A., Eastern Kentucky State College; additional graduate work at Colorado State College and Illinois State University. At Eastern since 1955.

ROBERT TARVIN, B.A., M.A. **Director of Student Activities and Organization**

B.A., M.A., Eastern Kentucky University. At Eastern since 1969.

LEONARD C. TAYLOR, B.A., M.A. **Registrar**
Associate Professor of Education

B.A., M.A., University of Kentucky; additional graduate work, University of Kentucky and Teachers College, Columbia University. At Eastern since 1966.

MARY LOU TAYLOR, B.S., M.A. **Assistant Professor of Social Science**

B.S., Southern Illinois University; M.A., Washington University, St. Louis, Missouri; additional graduate work, Washington University. At Eastern since 1964.

MORRIS D. TAYLOR, B.S., M.S., Ph.D. **Professor of Chemistry**

B.S., M.S., Ph.D., Purdue University. At Eastern since 1963.

CHARLES D. TEAGUE, B.S., M.S. **Assistant Professor of Physics**

B.S., East Tennessee State University; M.S., Ohio University; additional graduate work, University of Rochester. At Eastern since 1969.

EARL M. THOMAS, B.M., M.M. **Assistant Professor of Music**

B.M., M.M., University of Oklahoma; additional study, Juilliard School of Music. At Eastern since 1969.

MARVIN P. THOMPSON, B.S., M.S., Ph.D. **Assistant Professor of Biology**

B.S., University of Kentucky; M.S., Kansas State University; Ph.D., Southern Illinois University. At Eastern since 1968.

MICKI TYE THOMPSON, B.S., M.A., in Ed. **Assistant Professor of Elementary Education**

B.S., Lincoln Memorial University; M.A. in Ed., Union College; additional graduate work, University of Tennessee. At Eastern since 1968.

RALPH J. THOMPSON, B.S., M.S., Ph.D. **Professor of Chemistry**

B.S., M.S., East Texas State College; Ph.D., University of Texas; post doctoral research, Indiana University. At Eastern since 1965.

ROBERT THOMPSON, B.S. **Counselor**
Student Financial Assistance

B.S., Eastern Kentucky University. At Eastern since 1969.

JAMES W. THURMAN, B.S., M.A. **Director of Alumni Affairs**
Assistant Professor of Health and Physical Education

B.S., M.A., Eastern Kentucky State College. At Eastern since 1962.

KELLY THURMAN, A.B., M.A., Ph.D. **Chairman, Department of English**
Professor of English

A.B., Western Kentucky State College; M.A., University of Kentucky; Ph.D., University of Iowa. At Eastern since 1966.

JUANITA TODD, A.B., M.A. **Assistant Professor of Art**

A.B., Georgetown College; M.A., University of Kentucky; additional graduate work, Indiana University, University of Kentucky. At Eastern since 1960.

DANIEL LEE TORBETT, B.S., M.S., Ed.D. **Professor of Industrial Technology**

B.S., M.S., Arkansas State Teachers College; Ed.D., University of Missouri. At Eastern since 1965.

KAI-FU TSAO, B.A., M.A., Ph.D. **Assistant Professor of History**

B.A., National Chengchi University, Chungking and Nanking, China; M.A., University of South Carolina; Ph.D., Columbia University. At Eastern since 1965.

JAMES S. TUCKER, A.B., M.A. **Assistant Professor of Sociology**

A.B., University of Kentucky; M.A., DePauw University; additional graduate work, University of Kentucky. At Eastern since 1969.

KENNETH D. TUNNELL, A.B., M.A., Ed.D. **Chairman, Social Science Department**
Associate Professor of Social Science

A.B., Carson-Newman College; M.A., Eastern Kentucky State College; Ed.D., University of Kentucky. At Eastern since 1962.

ANN UHLIR, B.S., M.A., Ed.D. **Chairman, Department of Women's Physical Education;**
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B.S., Ball State University; M.A., Ed.D., Teachers College, Columbia University. At Eastern since 1965.

HOWARD L. UNTERBRINK, B.S., M.S. **Controller**

B.S., M.S., Eastern Illinois University; additional graduate work at Eastern Illinois University. At Eastern since 1966.

ROLAND VAMOS, B.S., M.S., M.A. **Conductor of the Orchestra**
Assistant Professor of Music

B.S., M.S., Juilliard School of Music; M.S., Columbia Teachers College; additional graduate work, Ohio State University.

PHILIP T. VANCE, A.B., J.D. **Assistant Professor of Law Enforcement**

A.B., Harvard College; J. D., University of Kentucky. At Eastern since 1969.

RICHARD G. VANCE, B.A., M.A. **Assistant Professor of Political Science**

B.A., M.A., North Texas State University; additional graduate work at University of North Carolina. At Eastern since 1969.

DAN RAY VARNEY, B.A., M.S., Ph.D. **Assistant Professor of Biology**

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HERBERT S. VESCIO, B.S., M.A. **Director, Student Financial Assistance**

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JOHN L. VICKERS, B.S., M.A. **Executive Assistant**
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B.S., Western Kentucky State College; M.A., University of Kentucky; additional graduate work, University of Kentucky. At Eastern since 1960.

GLORIA J. WAGNER, B.S., M.A. **Instructor of Business Education and Office Administration**

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C. SYBIL WALDROP, B.A., M.Ed. **Assistant Professor of Elementary Education**

B.A., Centenary College; M.Ed., North Texas State University; additional graduate work at North Texas State University. At Eastern since 1970.

J. MURRAY WALKER, A.B., B.D., Th.D. **Associate Professor of Anthropology**

A.B., Mercer University; B.D., Th.D., New Orleans Baptist Theological Seminary; additional graduate work, University of Kentucky, University of Colorado, New York University Studies in Israel, Emory University, Tulane University. At Eastern since 1966.

WILMA J. WALKER, B.A., M.A. **Instructor of Geography**

B.A., Morehead State College; M.A., University of Kentucky; additional graduate work, University of California at Los Angeles, University of Southern California, and University of Kentucky. At Eastern since 1967.

JOHN D. WALTENBAUGH, B.A., M.A. **Assistant Professor of German**

B.A., M.A., University of Cincinnati; additional graduate work, University of Cincinnati. At Eastern since 1969.

DAVID E. WARD, B.S., M.A. **Assistant Professor of Anthropology**

B.S., University of Illinois; M.A., Southern Illinois University; additional graduate work at Southern Illinois University. At Eastern since 1967.

NED L. WARREN, B.S., M.A., Ed.D. **Director, School of Health, Physical Education, Recreation and Athletics;**
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B.S., Georgia Southern College; M.A., Ed.D., George Peabody College for Teachers. At Eastern since 1967.

ROSE L. WARREN, B.S., M.A. **Assistant Professor of Elementary Education**
Supervising Teacher, Laboratory School

B.S., Georgia Teachers College; M.A., George Peabody College for Teachers; additional graduate work at George Peabody College for Teachers. At Eastern since 1967.

DAVID A. WARRINER, JR., B.S., Ph.D. **Associate Chairman, General Studies Science Program Professor of Physical Science**

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WILLIAM H. WATKINS, B.S., M.S., Ph.D. **Associate Professor of Psychology**

B.S., Western Reserve; M.S., Trinity University; Ph.D., University of Texas. At Eastern since 1968.

JAMES S. WAY, B.S., M.A. **Assistant Professor of Industrial Technology**

B.S., Central State College; M.A., Eastern Kentucky University; additional graduate work, Eastern Kentucky University and University of Missouri. At Eastern since 1967.

FREDERICK S. WEAVER, B.S., M.A. **Instructor of Industrial Education**

B.S. in Ed., Millersville State College; M.A. in Ed., Ball State University. At Eastern since 1970.

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B.A., M.A., Louisiana State University; Additional graduate work, Louisiana State University. At Eastern since 1969.

PEGGY S. WEBB, A.B., M.S.W. **Assistant Professor of Social Work**

A.B., Radford College; M.S.W., Richmond Professional Institute. At Eastern since 1967.

PAULA WELCH, B.S., M.A. **Instructor of Physical Education**

B.S., Florida State University; M.A., George Peabody College; additional graduate work at Eastern Kentucky University. At Eastern since 1969.

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GENERAL INDEX

Academic Division
  Buildings ... 13
  Probation ... 60
  Regulations ... 58
  Requirements ... 54
  Standing ... 60
Academic Programs, Degrees ... 46
Accounting, preparatory curriculum in CUC ... 75
Accounting, Department of ... 278
Administration Officers
  Staff
Admission to:
  University ... 44
  Graduate School ... 337
  Student Teaching ... 51
  Teacher Education Programs ... 50
Agriculture Mechanization ... 115
Agriculture, preparatory curriculum in CUC ... 76
Agriculture, Department of ... 114
Alumni Association ... 41
Anthropology, preparatory curriculum in CUC ... 77
Anthropology, Department ... 176
Application for Degree ... 63
Applied Electronics Technology ... 149
Art, preparatory curriculum in CUC ... 77
Art Department ... 183
Associate Degrees ... 340-342
Athletics ... 36, 321
Attendance, class ... 62
Auditing a Course ... 60
Automobiles, student ... 40
Awards ... 39

Baccalaureate Degrees
  General Requirements ... 62
  Second Baccalaureate Degree ... 63
Biology Department ... 186
Biology, preparatory curriculum in CUC ... 78
Board of Regents ... 349
Broadcast Engineering Technology ... 147
Buildings and facilities ... 13
Business Administration, Department of ... 280
Business Administration, preparatory Curriculum in CUC ... 80
Business Education and Office Administration, preparatory curriculum in CUC ... 81
Business Education and Office Administration, Department of ... 286

Cafeterias ... 30
Calendar, University ... 5

Campus
  Description ... 13
Catalogue, Students ... 58
Certificates ... 52, 53
Chemistry, Department of ... 196
Chemistry, preparatory curriculum in CUC ... 82
Child Care ... 126
Classification of Students ... 58
Clubs and Organizations ... 36

COLLEGES AND DEPARTMENTS
Central University College
  General Studies Course Offerings ... 68
    English Composition (GSE) ... 68
    Humanities (GSH) ... 68
    Physical Education (GSP) ... 68
    Health (GSP) ... 69
    Natural Science (GSC) ... 69
    Social Science (GSS) ... 70
Military Science ... 70
  Courses (MIL) ... 71

Academic Programs ... 74
  Initial Semester ... 74
  Accounting ... 75
  Agriculture ... 76
  Anthropology ... 77
  Art ... 77
  Biology ... 78
  Business Administration ... 80
  Business Education and Office Administration ... 81
  Chemistry ... 82
  Dietetics ... 82
  Distributive Education ... 81
  Drama and Speech ... 83
  Earth Science ... 83
  Economics ... 83
  Elementary Education ... 84
  English ... 84
Finance ... 86
  Food Service Management
  Foreign Language ... 86
  Geography ... 87
  Geology ... 88
  Health ... 89
  History ... 90
  Home Economics ... 91
  Industrial Education ... 93
  Industrial Technology ... 95
  Law Enforcement ... 96
  Library Science ... 97
  Management ... 97
  Manual Arts Therapy ... 98
  Marketing ... 98
  Mathematics ... 98
  Medical Technology ... 99
  Music ... 100
  Office Administration ... 100
  Philosophy ... 100
  Physical Education ... 101
  Physics ... 102
  Political Science ... 103
  Pre-Forestry ... 104
  Pre-Medical Sciences ... 104
  Pre-Veterinary ... 104
  Psychology ... 104
  Recreation ... 105
  School Health ... 106
  Sociology and Scoial Work ... 106
  Speech Pathology and Audiology ... 107
  Undecided ... 108
  Wildlife ... 108
College of Applied Arts and Technology
  Agriculture ... 114
  Home Economics ... 122
  Industrial Education ... 133
  Industrial Technology ... 145
    Kentucky School of Crafts ... 157
  Nursing ... 165
  School of Law Enforcement ... 159
  Traffic Safety Institute ... 167
College of Arts and Sciences
  Pre-Dental ... 172
  Pre-Engineering ... 172
  Pre-Forestry ... 173
  Medical Technology ... 175
  Pre-Law ... 53
  Pre-Medical Sciences ... 175
  Pre-Optometry ... 173
  Pre-Pharmacy ... 174
  Pre-Veterinary ... 174
  Anthropology and Sociology ... 176
  Social Work Major ... 178
Art ... 183
Biology ... 186
  Wildlife Management Major ... 188
Chemistry ... 196
Drama and Speech ... 200
English ... 203
  Journalism Minor ... 210

Foreign Languages 211
  French 212
  Greek 215
  German 214
  Latin 216
  Russian 215
  Spanish 217
Geography 219
Geology 224
History 230
Journalism Minor
Mathematics 238
  Music 244
  Philosophy 253
  Physics 255
  Political Science 260
  Psychology 266
  Social Work Major 178
  Wildlife Management Major 188
College of Business
  Accounting 278
  Business Administration 280
  Business Education and Office Administration 286
  Economics 292
College of Education
  Educational Administration 298
  Educational Foundations 301
  Educational Psychology and guidance 303
  Elementary Education 306
  School of Health, Physical Education, Recreation and Athletics 321
    Physical Education (Men) 322
    Physical Education (Women) 324
    Recreation and Park Administration 329
    School and Public Health 332
  Laboratory School 310
  Library Science 310
  Secondary and Higher Education 313
  Special Education and Rehabilitation 317
Graduate School 336
Richmond Community College 338
Continuing Education 343
  Correspondence 344
  Extension 345
Commencement 63
Commencement Honors 63
Concentrations 46
Correspondence 344
Counseling 31
Course Load 60
Course Numbering 57
Course Prefixes 57
Cultural Activities 38
Curricula
  Pre-Professional 53
  Requirements 51
  Teacher Education 50
  Two-year 340
  Preparatory 75
  Dairy Science and Technology 115
Data Processing 281
Degrees
  Joint Doctoral Program 299
  Master of Arts in Education 205, 299
    In English 205
    In Geography 221
    In History 231
    In Political Science 260
    In Guidance and Counseling for
  Non-School Personnel 299
  Master of Business Administration 276
  Master of Music Education 246
  Master of Public Administration 261
  Master of Science
    In Biology 188
    In Chemistry 196
    In Industrial Technology
    In Psychology 267
    In Political Science 260
Dietetics 82, 124
Dormitories
  Men's 18
  Women's 17
Expenses 26
Drafting and Design Technology 148
Drafting Technology 148
Drama and Speech, Department of 200
Drama and Speech, preparatory curriculum in CUC 83
Economics, Department of 292
Economics, preparatory curriculum in CUC 83
Education, Department of 298
Educational Opportunity Grants
Electronics Technology 149
Elementary Education, Department of 306
Elementary Education, preparatory curriculum in CUC 84
Employment, Student 34
English, Department of 205
English, preparatory curriculum in CUC 84
Entrance Requirements 44
Executive Secretarial Program 289
Expenses and Living
  Accommodations 26
Extension Division 345
Faculty 353
Family Housing Facilities 20
Fees and Expenses 26
Finance 282
Financial Assistance 32, 35
Food Service 30, 125
Food Service Administration 86
Food Service Technology 126
Foreign Language, Department of 211
Foreign Language, preparatory curriculum in CUC 86
Fraternities, social 38
General Academic Information 43
General Business 283
General Education Requirements 54
General Studies Course Offerings 68
Geography, Department of 219
Geography, preparatory curriculum in CUC 87
Geology, Department of 225
Geology, preparatory curriculum in CUC 88
Grading System 58
Graduate Record Examination 338
Graduate School 336
Graduation Requirements 54
Guidance and Counseling 31
Health
  School 332
  Public 333
Health, preparatory curriculum in CUC 89
Health Services 31
History, Department of 230
History, preparatory curriculum in CUC 90
History of the University 10
Home Economics, Department of 122
Home Economics, preparatory curriculum in CUC 91
Homemaking Supervision 127
Honorary Societies 37
Horticulture 116
Housing
  Accommodations 29
  Expenses 26
Identification Card, Student 36
Industrial Education, Department of 133
Industrial Education, preparatory curriculum in CUC 93
Industrial Technology, Department of 145
Industrial Technology, preparatory curriculum in CUC 95
Infirmary 31
Information for the Student 25
Instructional Media Technology 150

Journalism 210
Kentucky School of Crafts 157
Laboratory Fees 27
Laboratory School 310
Late Registration 61
Law Enforcement 160
Law Enforcement, School of 159
Law Enforcement, preparatory curriculum in CUC 96
Library Science, Department of 310
Library Science, preparatory curriculum in CUC 97
Living Accommodations 26
Loans 33
Majors 46
Management 283
Management, preparatory curriculum in CUC 97
Manual Arts Therapy, preparatory curriculum in CUC 98
Marketing 284
Marketing, preparatory curriculum in CUC 98
Mathematics, Department of 238
Mathematics, preparatory curriculum in CUC 98
Medical Record Technology 166
Medical Services 31
Medical Technology 175
Medical Technology, preparatory curriculum in CUC 99
Men's Residence Halls 18
Military Science, Department of 71
Music, Department of 243
Music, preparatory curriculum in CUC 100
Non-Residence Fees 26
Numbering of Courses 57
Nursing, Department of 165
Nursing 165
Office Administration, preparatory curriculum in CUC 100
Officers, of Administration 351
  of Board of Directors 349
Official Directors 349
Organizations, Student 36
Philosophy, Department of 253
Philosopry, preparatory curriculum in CUC 100
Physical Education 321
Physical Education, preparatory curriculum in CUC 101
Physics, Department of 255
Physics, preparatory curriculum in CUC 102
Placement Office 41
Political Science, Department of 260
Political Science, preparatory curriculum in CUC 103
Pre-Dental (1 & 2 years) 172
Pre-Dental 172
Pre-Engineering 172
Pre-Forestry 173
Pre-Forestry, preparatory curriculum in CUC 104
Pre-Law 53
Pre-Medical Science, preparatory curriculum in CUC 104
Pre-Medical Science 175
Pre-Optometry 173
Pre-Pharmacy 174
Pre-Veterinary, preparatory curriculum in CUC 104
Pre-Veterinary 174
Printing Technology 150
Probation, Academic 60
Provisional Elementary Certificate 52
Provisional High School Certificate 52
Psychology, preparatory curriculum in CUC 104
Psychology, Department of 266
Publications, Student 39
Purpose of the University 11
Quality Points 60
Recreation, preparatory curriculum in CUC 105
Recreation Program Administration 329
Recreation Supervision 330
Refund Policy 30
Registration Fees 26
Registration, Late 61
Religious Activities
Residence Halls 30
Residence Requirements for Degree 62
  For Fees Purposes 27
Retired Administration
Retired Faculty
Richmond Community College 338
  Agriculture Mechanization 115
  Applied Electronics Technology 149
  Broadcast Engineering Technology 147
  Child Care 126
  Dairy Science and Technology 115
  Drafting and Design Technology 148
  Drafting Technology 148
  Electronics Technology 149
  Executive Secretarial Program 289
  Food Service Technology 126
  Homemaking Supervision 127
  Horticulture 116
  Instructional Media Technology 150
  Law Enforcement 160
  Medical Record Technology 166
  Nursing 165
  Printing Technology 150
  Recreation Supervision 330
  Vocational Crafts 158
  Vocational-Industrial and Technical Education 136
Schedule Changes 61
Scholarships 32
Scholastic Average 58
School Health 332
Secretarial Science Program 289
Social Activities 36
Social Fraternities and Sororities 37, 38
Social Science Area 231
  Non-Teaching 231
  Teaching 231
Social Work Major 178
Sociology Department 176
Sociology and Social Work, praparatory curriculum in CUC 106
Sororities, social 37
Speech 200
Speech Pathology and Audiology 317
Student Employment 34
Student Load 60
Student Organizations 37
Student Services and Activities 36
Supervised Student Teaching 51
Teacher Education Curricula 50
Traffic Safety Institute 167
Two-Year Programs
Undecided 108
University, The
Vocational Crafts 158
Cocational-Industrial and Technical 136
Wildlife Management Major 188
Wildlife, preparatory curriculum in CUC 108
Withdrawal:
  From the University 61
  From a Course 61
Work-Study Program 35

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